DEVOTED TO AGRICULTURE AND ITS KINDRED ARTS AND SCIENCES.

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RAYNOLDS & NOURSE, Proprietors. Office....Quincy Hall. SIMON BROWN, Editor. FRED'K HOLBROOK, HENRY F. FRENCH, Associate Editors.

FARM WORK FOR MAY.

Now the bright morning star, day's harbinger,
Comes dancing from the east, leads with her
The flowery May, who from her green lap throws
The yellow cowslip and the pale primrose.
Hail, bounteous May! that dost inspire
Mirth, and youth, and warm desire;
Woods and groves are of thy dressing,
Hill and dale both boast thy blessing!
Thus we salute thee with our early song,
And welcome thee, and wish thee long.—Milton.

May is always a busy month, but cold winds and storms occupied so much of April that but little could be done by way of preparation for planting and sowing. But if the work of the farm is reduced to a system, so that the business which needs it most shall be attended to first, a great amount of labor may be accomplished in the month by two or three pairs of stout hands urged by earnest hearts. Vegetation will undoubtedly be very rapid. The intense cold through the winter and its long continuation in the spring, has given plants great sensibility, and they will burst into life with wonderful rapidity. The lateness of the season will find the sun running high and warming the ground so readily that the seeds will sprout and be up, perhaps, as early as in warmer seasons—so that there is no room for discouragements, but plenty to be up in the morning with the lark, and improve each hour to the best advantage.

Plowing.—Split the Indian hills; plowing the fields one or two days before planting or sowing them is better than a longer time, if the land is ordinarily dry. Sward land intended for corn is improved by a good coat of grass turned under, so that the longer it is left the better, if in season for the corn. The best crops of corn we have seen of late years were where a large portion of the manure had been spread and plowed in, and before dropping the corn a small amount of good compost added to the hill; this gives the kernels an early start and supports them until the roots finds sustenance further off.

Grain.—As soon as the ground is sufficiently dry to fall into fine particles upon being plowed, sow oats, barley and other grains. When it is to be laid down to grass, be generous with the seed—we mentioned this last month and now urge it again—one bushel of red top, twelve quarts of herds grass and six pounds of clover is not too much to the acre. The difference in the crop for four or five years will pay more, each year, than the extra cost of the seed; and the thickness of the grass from the seed you sow will keep out wild grasses and weeds.

Corn.—Some persons are becoming dissatisfied with this crop. It can scarcely be doubted, however, that it may be raised with profit in every part of New England. We think the dissatisfaction arises from the attempt to cultivate too much; the manure being spread over so much ground as scarcely to be felt by the plants. The result of such cultivation is twenty to forty bushels to the acre, instead of forty to eighty as it should be. We think the fodder on an acre of good corn will well nigh pay the expense of cultivation, if it is properly preserved. And with high cultivation the land is in condition after the corn crop to bring two or three tons of hay to the acre for some three to six years, with the application of slight top dressing.

Grafting.—The earlier this is done in May the better. If you have old healthy trees they will yield you a return for working them over and cultivating them much quicker than you can possibly get it from young trees. A large, sound, old apple tree, though producing nothing but crab-apples, is worth fifty dollars, if it stand near home and convenient for cultivation; some are worth twice that amount. Now is the time to act upon it. We have seen a tree from which, we have repeatedly been informed, more than twenty barrels of marketable apples have been taken in a single year. It is a Baldwin, and bears more or less, every year—but has every advantage which high cultivation affords. The modes of grafting are well understood—we will only add—what

seems not to be fully appreciated yet—that an apple tree needs cultivation just as much as a hill of corn and will not flourish well without it.

THE GARDEN.—We feel bound constantly to urge upon the attention of our readers the importance of a good garden. Its influence is good every way. It spreads the table with palatable and nutrient food, and fills the dessert dishes with luxuries, and thus saves the cash which must otherwise be paid for beef, ham, veal and lamb; beside promoting health and spirits more than the meat would. Then a good garden is a civilizer. Whoever meditated crime in the midst of luxuriant vegetables and fragrant flowers? Its moral tendency is apparent—and so is that of the orchard. Read Hawthorne's reflections in the orchard, as described in "Mosses from an Old Manse." They beautify the home wonderfully and kindle emotions which never die out of the heart.

But we had almost forgotten the individual plants, and must hasten to say a word or two of

ASPARAGUS.—This is a delicious and easily cultivated vegetable, and Mr. CUTTER, of Pelham, has recently given you the best mode of growing it. What the old bed requires now is to cut off the last years stalks just below the ground and burn them; loosen the earth about the roots and clean up the whole bed. As the sweetness and tenderness of this plant depends upon its rapidity of growth the soil should be made very rich.

BEANS—Should be planted as soon as you feel secure from frost. They are ornamental planted in hills two or more feet across with birch sticks stuck about the edge and tied together at the top.

Then there are peas, and beets of two or three kinds, parsnips, carrots, lettuce, radishes, cucumbers, rhubarb, pepper-grass, spinage, salsify, parsly, tomato, turnips, celery, early corn, melons, onions, early potatoes, summer squash, and cabbages, all affording the proper summer nutriment and requiring a similar soil for their production. Sow and cultivate well a few of each, and you will find your account in it.

SMALL FRUITS.—Set red and white raspberries, thimbleberries, black and white, also currants and gooseberries; they are cheap and wholesome food and as easily raised as potatoes. Any home will have charms for children where these are plentifully growing.

ORNAMENTAL.—Do not allow the lusty teams and and the broad acres, the grass, the grain and the trees, to occupy all your time, but give a thought and an eye occasionally to the beautiful. Spread out a sunny space for the daughters, where the boys will cheerfully assist them with the spade. What a charming spot! Here, are the mixed balsams and carnations; the mignionette, mourning bride and columbine; there, love lies bleeding, and in the corner, love in a mist, the candytuft and cantebury bell. Why, you resume your youth here—*Time* almost ceases to make his mark. Old scenes come thronging to the soul, such as when you sat on the rustic seat in the garden, and dissected flowers with *her* who is now the mother of these beautiful and happy daughters. Such are the influences of the flower garden. We need not go to the books for poetry, it is in nature every where, but especially in such a group as this,

"There's beauty all around our paths, if but our watchful eyes,
Can trace it midst familiar things, and thro' their lowly guise."

We insist upon it, that there *is* time with all to be given to the ornamental; it will make you richer, better, happier, more cheerful, and to die easier, and will have the same influences upon your family, by creating something of the beautiful, around you; and we aver that this is a portion of the proper and fitting *farm work* for the merry month of MAY.

BOOKS.

THE HIVE.—This is a beautiful little volume containing all the plain, general directions for the management of bees, with an account of their diseases, the remedies, &c., with numerous illustrations.

HORSES, their varieties, breeding, and management in health and disease, and enriched with illustrations.

DOMESTIC FOWL, and ornamental poultry—full of biddies, birds and their dwellings, with different modes of feeding, &c.

THE HOG, its origin and varieties, and treatment under disease.

These four books are prepared by H. D. RICHARDSON, Esq., and are written in a plain, concise style, rejecting speculations and theories almost entirely. They are printed and covered elegantly, and sold for 25 cents each. Here, then, for one dollar, you get about all the knowledge that can be derived from the books, of the hog, the horse, the honey bee and domestic poultry. They are published at New York by the farmer's publisher, C. M. SAXTON, and sold in this city by Messrs. *Tappan & Whittemore.*

☞ We have one or two suggestions to make in relation to these books. The first, and really an important improvement in them, would be to add to each an analytical index. If a book is worth printing, it is worth having an index—a table of contents is not sufficient. The second suggestion is, to print the title on the back of the book. This may run lengthwise, and add nothing to the cost, and will not only be convenient, but ornamental.

☞ The *Scientific American*, in our judgment, is among the most useful publications in the country. Its articles are of a most practical character, and written with conciseness and force. There is a "wouldn't flatter Neptune for his trident" air about it which we admire. We read it constantly, with profit and pleasure.

For the New England Farmer.

SWEET APPLES—GRAFTING.

No department of husbandry requires greater care and judgment than in the selection of the kinds of fruit intended for propagation either by grafting or by growing young trees. The difference between a wise choice and the opposite, is the difference between a good tree and one that is worthless. The reason that so many fruit trees, comparatively worthless, are still allowed to "cumber the ground," may be found, perhaps, in the fact, that we are apt to confine the comparison from which selections are made to limits altogether too narrow. Every neighborhood has its own special favorites. These, like most other local matters, obtain a factitious importance and value, not warranted by their intrinsict merits. Let a majority of our common farmers, who now rest satisfied with the varieties they have upon their farms, take up Downing's or Cole's Fruit Book, and we think they would at once extend their choice, and introduce new varieties from abroad.

Perhaps these remarks are applicable to one kind of apple, which has been noticed several times of late in the *Farmer*, and in a way, it seems to me, calculated to lead to the unpleasant disappointment of many. I refer to the Danvers Winter Sweet. By repeated notices in the papers, this apple has gained great notoriety, and has acquired a reputation altogether above its merits. As I happen to know something of this fruit, as *it is* under good cultivation, in various soils not twenty miles from its native place, I deem it a duty to counsel a degree of caution in regard to its cultivation. To the best of my knowledge and belief, this fruit has universally disappointed the expectation of cultivators in this vicinity. The tree is not a handsome grower, the fruit is inferior in size, apt to become spotted and to blight as it approaches maturity, flesh rather tough, of a dull sweet, inclined to bitter, and when kept late in the winter, becomes affected with the potato rot, the skin over the whole surface turning black so as to resemble that disease. We regard it as in no respect equal to some half dozen native varieties known here as the Morse Sweeting, Flat Sweeting, Green Sweeting, &c. There are other varieties, which I suppose are superior to any of these, such as the Orange and Ladies' Sweeting. In Worcester county, I hear of the Rockport Sweeting, concerning which I am unable to speak. I think, Mr. Editor, you would render the public a valuable service by giving a short list of *the best* winter sweetings. I hear constant inquiries for such a list. With my present knowledge, I should select from the following list:—

Orange Sweeting, (see Cole or Downing.)
Seaver " " "
Ladies' " " "
Leicester or Flat, (who can describe?)
Rockport Sweet, " "

I would invite the attention of the editor and his correspondents to this list, in the hope that it may be so "revised and enlarged" as to furnish something reliable.

The use of wax, instead of clay, in grafting, has become the general practice, and is found to answer ordinary purposes very well. But in grafting old trees, whose bark is rough and scaly, it will be found that clay is much better, and can be applied with greater facility. After setting the scions (as directed in the excellent article of N. P. M., March 20,) take some strips of cloth, and put in each clay enough for the purpose, roll it loosely in the cloth, and place in a basket. These can be taken out and applied, without bringing the hands in direct contact with the clay and thus avoid soiling them unpleasantly. A friend, of large experience in using wax, informs me that mutton tallow is better than beef. The wax made with it is less apt to crack and is less injurious to the tree. It is well to keep ready for use a quantity of grafting clay, as it is useful in case of accident in applying to the wounded parts of trees. B. F. S. G.

West Newbury, April 6, 1852.

Remarks.—Fruits, as well as everything else, in these days of inquiry, are obliged to pass the ordeal of severe criticism. Free inquiry, and a free expression of opinion, if in the spirit of kindness and with a serious desire for improvement, will evolve the truth, and enable us to be pretty certain which are the best among the great variety of fruits now presented to us for cultivation.

For the New England Farmer.

A LARGE CALF.

Messrs. Editors:—Mr. B. F. Dudley, of Milton, Mass., has in his possession a beautifully marked, red and white bull calf, of the Ayrshire breed, which on last Saturday was six weeks old, and weighed two hundred and twenty-two pounds. His first weight at four days old, was one hundred and eighteen pounds, so that his average daily increase from that time till Saturday of last week was two and five-eighths pounds. During the last week, however, he gained at the rate of three pounds per day. His mother is a medium sized, handsome animal, also belonging to Mr. Dudley.

People in our neighborhood consider this calf an extraordinary specimen of his kind, but they may be perhaps mistaken, and if you or your readers should know of anything surpassing it, you would confer a favor by mentioning its *whereabouts*.

A Subscriber.

Milton, April 6, 1852.

HARMONY OF NATURE.

Some insects have no defence, except the diversity of their motion. When the notopeda or elater is laid upon its back, it uses a spring hidden in its breast, and, like a skilful jumper, it falls upon his feet; the butterfly escapes from the birds by its zig-zag flight; the spider runs away from its enemies by letting itself down its thread, like a sailor along a cable; the gyranus describes with rapidity circles on the crystal waters, and the tipula lightly execute their dances there without wetting their paws.

If we cast a passing glance upon the fishes, we must perceive that the fluid which surrounds them serves as a means of conveyance; aided by their fins, they travel through their domains with ease and comfort. Nature has provided them with a bladder filled with air, which they have power to empty and again to fill at pleasure; and thus they diminish or increase the weight and volume of their bodies as they rise or fall in the water.

It is generally known that some fishes, like

birds, are provided with an oily gland; with this, their scales are anointed with a substance which protects them from the relaxing effects of the water. But what is most surprising is, that this gland is placed on the head, in such a manner that the simple act of swimming causes the oil to slide over their bodies; and covers them completely. Without this admirable position, this gland would have been useless, as fishes have neither hands nor feet to anoint themselves with this oil.—*English paper.*

SCHOOL OF DESIGN FOR WOMEN.

He is but a poor observer of New England society, who has not become satisfied that the true idea of Republicanism is yet but half wrought out among us. *Man* has gained by putting off the empty forms of monarchy and aristocracy—gained in strength and manliness by the adoption of a form of government, which makes possible for him the highest places of honor and authority in the State—gained by fleeing from the odious and unjust preferences of the laws of entails and primogeniture. He has in the pursuits of politics, in the constant changes and easy acquisition of property, in the primeval forests of the West, in the mines of California, incitements to vigorous life, both mental and physical, never known to men of the old world. He is a freer, more fully developed, and *should be*, a better and happier man. But what has *woman* gained, by exchanging the old for the new world? In the mother country, a woman may be, and now is a queen, and many women hold rank and title in their own right. In America, royalty and rank and title do not exist. What has she *gained?* A better husband, it may be, and as a *wife*, in consequence, a better home and a higher and happier life. This *might* be, and would seem to follow, almost of course, did we not, every day, see how the very principles of equality, improving our general style of living, and increasing the labors of our households, at the same time are doing away servitude and servants, and bringing upon the wives and daughters, even of men of competent estate, additional burdens.

But of this we intend not now to speak. There are, and always must be, among us, women for whom no adequate support is provided by others; maidens young, and more advanced, who are looking fearfully into the future, or at the present, for an honorable means of an independent subsistence; wives who would gladly relieve their husbands, struggling with ill health or misfortune, of their support; widows with no help this side Heaven, dependent on their own efforts for bread for themselves and their little ones. Indeed, in the peculiar vicissitudes of American life, no woman can feel sure that she may not, at some time, be thrown upon her own resources for support, and no father can look upon the innocent face of his little daughter at his knee, without a shudder at the dreadful alternatives presented to helpless woman, exposed at once to want and temptation.

A few positions, it is true, are already open, by which women may gain for themselves a support, but these are entirely inadequate to furnish respectable employment even to the few who are fitted to occupy them. In this view alone, had it no other aim or effect, we should regard an institution of the character named at the head of this article as a noble and benevolent scheme. Such an institution is now open in Boston, in Thorndike's Buildings, in Summer Street. It is known as "The New England School of Design for Women." Its objects are stated to be, "1. To educate a body of professed designers, capable of furnishing original designs for manufactures and other purposes, where ornamental designs are required. 2. To teach the various processes of Engraving, Lithography, and other methods of transferring and multiplying designs. 3. To educate a class of teachers in drawing and design."

We have recently had the pleasure of a visit to the school, which has now been in operation about six months. We found a pleasant, and apparently happy assemblage of about eighty pupils, none of whom are allowed to be under fifteen years of age, or compelled to be of any particular age above that, no *outside* limit being fixed by their regulations. Specimens of their drawings, which we were allowed to examine, indicated so remarkable a proficiency for the time during which the school has been taught, that we could not help suspecting, that the fair hands of the artists had been somewhat used to the pencil at an earlier date.

The "designs for manufactures" referred to above, will include designs for paper-hangings, carpets, calicos, and the like. The combination of *colors*, as well as *forms*, is to make part of the more advanced course.

Most of the designs for all our fabrics of the descriptions named are now furnished from Europe, and from the uncouth, unintelligible figures which haunt our vision on the walls and floors of our dwellings, as well as on the shawls and dresses of the ladies, one would infer that the aristocracy of taste had not been selected in the old country to preside over the labors of the designers. It frequently requires a violent exercise of the wits of a paper-hanger to discern *which side up* a figure looks best, and carpet-makers often are exceeding puzzled to ascertain what part of a breadth of carpeting matches its neighbor breadth. Many a nervous invalid has had his illness protracted for weeks by the agony he has endured in endeavoring to comprehend the meaning of the vague, wandering forms which adorn the (papered) walls of his chamber. Many a child has doubtless been frightened out of half his wits by the *accidental* diabolic faces which peer out from the paper-hang-

ings by moonlight. Then, there are the India shawls which fall in folds so gracefully from the drooping shoulders of our belles, adorned with that everlasting, unchanging *palm-leaf*, as we are informed it is, which, to our agricultural eye, suggests the idea of an ill-grown, crook-necked squash!

Manifestly, there is a demand for taste and talent and labor, refined taste, high talent and respectable and well compensated labor, in these departments. Let us have gracefulness and good taste manifest in all our surroundings. "Beauty is an emblem of inward good," and however philosophers may refine upon the principles of its operation to give us pleasure, we believe with the poet, that "a thing of beauty is a joy forever," and that he is a benefactor of his race, who contributes to the general stock of the beautiful, whether it be color or form or landscape—picture, statue, tree, or flower or lawn.

Institutions of this kind must tend in every way to promote correct taste, and true refinement, not only among the pupils who are thus rendered familiar with beautiful forms and combinations of color, not only among the friends whom they daily meet in social life, but as we have already suggested, throughout the whole community, where the products of their labor shall be mingled with the affairs of life.

Again, we like the plan for its truly republican tendency. In the school, as in our common schools for children, there is no distinction of rank. Nature's aristocracy of genius and true nobility of soul will have their first place there, as everywhere. The effect of an intercourse between females of all classes of society, associated for a common object on equal terms, is to awaken a sympathy powerful every way for good.

Such an institution tends *to give dignity to labor*, to make *useful* labor respectable. It has *always* been respectable among young ladies to perform *useless* labor, to spend months of the few precious years given them on earth, in *worsted work* and *embroidered kerchiefs*, but to aid the over-burdened mother in keeping the family wardrobe in order has been regarded as rather a low business. To practice music or drawing as a recreation, is regarded as evidence of being *accomplished;* but to *teach* those accomplishments for compensation, is too often felt to be more degrading than dependence and an aimless life. To correct these false impressions, to incite each to do her part in the business of life, to make it honorable to help "to bear one another's burdens," are among the legitimate results of such an institution.

The school is under the direction of an executive committee, composed of an equal number of ladies and gentlemen. Miss E. D. Littlehale is Secretary, and conducts the correspondence. She is a lady whose light is steadily shining, and cannot long be hid. We should be glad, did we feel at liberty, to repeat some things that Fame has told us of her labors of love, and of her devoted and self-sacrificing spirit.

We will only add, that we trust the generous philanthropy which has prompted this enterprise, will be enabled to sustain it, and perfect it into a permanent system.

Trials and embarrassments of all kinds are a part of the discipline of all who lead in any good work. The ridicule of the ignorant, the cautiousness of conservatism, the *hyper-sensibility* which fears lest womanhood should transcend its *proprieties*, and the carelessness and unsympathizing spirit of merely *worldly* men, are among the outward impediments of all such schemes. Differences of opinion, and want of knowledge as to the details of management among its directors and friends, the petty jealousies and animosities incident to poor human nature everywhere, will stand at times like lions in the way, to turn brave hearts from the paths of noble action.

From what we know of those who have charge of this school, we have confidence that they will be able to endure unto the end, and that they will have in addition to the consciousness that they are earnestly doing the will of their Master, the reward of success.

CURRANTS AND GOOSEBERRIES.

It is to be presumed that not one in a hundred understands the simple process of cultivating either currants or gooseberries, although it has been detailed in all the horticultural books with which the world abounds. Thousands of persons, with every appliance for success, are still content to live without a plentiful supply of these delicious, healthy, and cheap luxuries, merely because they have not thought of the matter. They have a few stinted bushes set in the grass, with three-fourths of the stocks dead, and then wonder why they do not bear in abundance.

There is not a more beautiful shrub growing than the currant, properly propagated; and the same may be said of the gooseberry. Cultivators who pay any attention to the subject, never allow the root to make but one stock, or, as the English say, "make them stand on one leg"—thus forming a beautiful miniature tree.

To do this you must take sprouts of last year's growth, and cut out all the eyes, or buds, in the wood, leaving only two or three at the top; then push them about half the length of the cutting into mellow ground, where they will root, and run up a single stock, forming a beautiful symmetrical head. If you wish it higher, cut the eyes out again the second year. I have one six feet high. This places your fruit out of the way of hens, and prevents the gooseberry from mildewing, which often happens when the fruit lies on or near the ground, and is shaded by a superabundance of leaves and sprouts. It changes an unsightly bush, which cumbers and disfigures your garden, into an ornamental dwarf tree. The fruit is larger, and ripens better, and will last on the bushes, by growing in perfection, until late in the fall.

The mass of people suppose that the roots make out from the lower buds. It is not so—they start from between the bark and wood, at the place where it was cut from the parent root.—*Vermont Chronicle.*

For the New England Farmer.

OSAGE ORANGE HEDGE.

BY LUTHER GILBERT.

Mr. Brown:—Sir—There has been some doubt as to the hardiness of this plant for a hedge, in the vicinity of Boston, and as I think I have given it a fair trial, I will give you the result of my experience. It is the most beautiful and effectual hedge plant I ever saw. It will turn anything, from a chicken to cattle and horses, if well trimmed for a few years. It has a most beautiful green foliage, and sends out a thorn at every leaf that is as sharp as a needle. I have left with Messrs. Ruggles, Nourse, Mason & Co.'s very gentlemanly and attentive seedsman, (Mr. Everett) a few of the shoots that grew last year; they are about 5 feet long, and I cut them off one foot above where they started last spring. It likes a deep, rich soil, but will grow in any common field soil. I have on my place about forty rods of it that has been set from one to two years, and don't think that a plant has been killed by the severity of the winter—with the exception of a few that have been thrown out of the ground by the frost.

In the spring of 1849, I bought the seed of Ruggles, Nourse, Mason & Co., and on the 28th of April I sowed it in rows, (after soaking it in warm water for 30 hours) 18 inches apart and from 2 to 3 inches apart in the row. It came up and grew one foot or more the first summer; the root running down about as long as the top, without many side roots. In the fall, after the frost had killed the leaves, I drew the earth up to them 5 or 6 inches high, and in the spring of 1850, when the earth got so as to work well, I set them out where I wanted my hedge, after cutting off one-half of the bottom of the root so as to make them send out side roots. I set them in double rows 6 inches apart and one foot apart in the rows—after they were set they were cut off to within one inch of the top of the ground; in the fall, I put some compost manure about the roots to keep them from getting thrown out by the frost.

In the spring of 1851, they were all cut back to within 3 inches of the ground and kept free from weeds all summer, and they grew very fast, as you will see by the shoots that I have spoken of above. When they are cut as I have described, they send out shoots in every direction. Last fall they did not have any protection, and I find them this spring all alive and looking well; where the soil was poor and shallow, some of them have been started up a little by the frost. But I think that may be remedied by drawing up the earth about their roots for one or two seasons. This spring, I shall cut them all back to within one foot of the ground, which will make the hedge very thick at the bottom. They grew so fast and so late, that the ends of the new wood does not get ripe, which dies, but not near so much of it as will be necessary to cut off. If it is not cut down when it is set out, it will make a very handsome tree and grow thirty or forty feet high. I have set out some for that purpose, which I expect to see some very handsome oranges growing on in a few years. Yours, L. G.

Grantville, April 9, 1852.

CULTURE OF SWEET POTATOES.

Some two or three years ago a gentleman in Hinsdale, N. H., sent us a box of sweet potatoes in the spring, of his own raising, and in a letter stated that he was in the practice of raising them to considerable extent for his milch cows as well as for family use; that he found no difficulty in so doing, and considered them a profitable crop.

Sweet potatoes may be started by planting the small potatoes in a hot-bed, prepared as for other things. The potatoes are cut open lengthwise and laid the cut side down, and when the sprouts are up about an inch they are pulled off and transplanted as cabbage plants are. The other method is to procure the slips themselves and plant, which is much the easiest and cheapest way to those who have not the hot-beds, or do not wish to go through the former process. Some persons plant upon ridges, but we think that unnecessary in our usually dry, hot summers. The soil should be light, rich, and warm, a sandy loam being best for them. The vines run upon the ground, something like the cucumber, the leaves are deeply serrated, and their appearance in the garden is rather ornamental.

The slips ready for transplanting may be obtained of L. Rand & Co., No. 84, Faneuil Hall Market, Boston.

SPRING WEATHER.

Following in the train of the winter weather, the spring up to this time, April 17, has been cold and stormy in the extreme. A snow storm began at Philadelphia, on Sunday evening, the 11th, and on Monday it reached New England in great fury. The steamers in the Sound were detained and in imminent danger. One or two wrecks occurred on Cohasset Rocks, with dreadful fatality to life. Snow storms, and hail and rain storms, accompanied with high winds, have come thick and fast upon the heels of each other. To-day the sun shines brightly upon the snow drifts under the walls, and on the sparkling waters as they dance down the swollen brooks. Farm work will come in a heap—the boys wont nap much after daylight until the trees are set and the planting is done. But we shall have fine weather yet, and there is undoubtedly "a good time coming."

Norfolk Co. Ag. Society.—At the late annual meeting of this society, the elections were,

Marshall P. Wilder, *President*,
E. L. Keyes, *Corresponding Secretary*,
E. M. Richards, *Treasurer*.

The Exhibition will be on the 28th and 29th September next.

TIMELY WORDS.

Cows—Carrots—Plowing, Deep or Shallow—No better field for ambition than Farming—What helps to make a good Editor—Wordsworth, and the influences of his Poetry.

The following extracts are from a private letter from our esteemed friend and associate, Mr. Holbrook. They are partly necessary as an explanation, and fit every way for the present moment.—His hints to ourself shall prompt new efforts, but can hardly increase our love of nature; it already amounts to an enthusiasm which requires the check rein and curb at each returning change of the seasons. Nature, to us, is

> "The Living Page, whose every character
> Delights and gives us wisdom."

That Mr. Holbrook is in favor of the carrot for stock, we have no doubt. In an article in the *Farmer* of April, 1850, he says, "The carrot gives a better return than almost any thing the farmer raises; as winter feed, it highly promotes the health and growth of calves, colts and store swine; cows fed upon it almost invariably do well at calving time, and afterwards give a full flow of milk, yielding the best of butter."

Our associate will excuse us, we trust, for the unceremonious appropriation we have made of his letter. There is a peculiar fitting and freshness in letters written in this off-hand manner, that often tempt us to use them, although not intended for publication.

Brattleboro', April 10, 1852.

S. Brown, Esq.:—My Dear Sir,—I have just read Col. Lincoln's communication on "Cows and Carrots." Perhaps the man does not live in whose judgment and sagacity in all agricultural matters I more fully confide than in Col. Lincoln's. I know him thoroughly, every way. Massachusetts has not a more sound, thorough, sensible, respectable and every way worthy man than the Colonel in all her borders. Two years ago, I think, this April, I spent a number of days at his place, investigated his system of *Irrigation*, accompanied him into Rhode Island to look at the system there practiced, and gave an article to the *Albany Cultivator* on the subject.

If the Colonel infers that I am unfriendly to the raising and feeding of carrots, he is quite mistaken. I raise and feed considerable quantities of them every year, and have repeatedly written in favor of growing and feeding the crop. On the naked question of the *direct* effect of carrots upon milch cows, I am of opinion that they do not directly increase the *quantity* of milk. But they are still very valuable for cows, because they promote a high state of health, strong digestion, and fine appetite, enabling the animal to consume, and digest, a large quantity of, and appropriate the milk-producing and nutritious properties of, hay. For brood mares, for colts, for *all* horses, for young cattle, for hogs, they are excellent.

Your correspondent, "C.," on "Plowing—Deep or Shallow," has, in the main, expressed himself correctly and well. I fear, however, that he too easily excuses *shallow* plowing. True, young farmers in debt for their land, and their soil poor and thin, cannot go down at once to nine or twelve inches. But the very best way to pay for their farms speedily, and have land left that is worth something, is to plow deeper and deeper every rotation, accompanied with high manuring. I had this very subject on my mind for an article for you when I received the last *N. E. Farmer*. Perhaps I shall not now write upon it, as I might express opinions somewhat variant from "C."'s, though probably we might not differ in a conversation on the subject.

Judging from personal experience, I should say to young men that there is no better field, for honorable usefulness, or if the person has ambition, there is no surer and quicker road to distinction, than scientific and practical farming, together with a judicious use of the pen upon agricultural subjects.

I am pleased to notice, from time to time, your sensibility to the influences of nature. Encourage this inclination, my dear sir, and study nature profoundly, if you would be an agricultural editor indeed—if you would be a *man*, every way. I presume you have read the poet Wordsworth, over and over again. I read his works more or less every spring; and can say, with truth, that they are calculated to quicken all the better tendencies of the heart, and to lead one to a closer communion with Nature.

Very truly, your friend,

F. Holbrook.

CHANGE OF GRAFTED FRUIT.

Some time ago we published a letter from Mr. Jacob B. Farmer, of Concord, in this State, in relation to a change in grafted fruit, which he described. Dr. Holmes, editor of the *Maine Farmer*, and, by the way, one of the best agricultural papers in the country, has noticed Mr. Farmer's statement, and makes the following remarks in relation to a similar occurrence.

Change of Grafted Fruit.—Does the original stock or tree into which a graft is put ever overcome the graft? We believe there are well authenticated instances where this has taken place. A few years ago we gave an account of an instance of the kind which Mr. Thomas C. Wood, of Winthrop, related to us as having taken place in his orchard. A graft had borne for several years the true fruit of the graft. The fruit, however, began to change, and in a few years the graft bore an apple nearly or quite resembling that which the tree bore before being engrafted. Mr. W. attributed the change to the wood of the stock somehow gaining the ascendency over the graft. Some of our cotemporaries pronounced the whole a "fish story," or at any rate a mistake.

New Variety of Potato.—A bulb of the potato species, which was found growing indigenously in Mexico, was brought to this country some years since, by a gentleman who returned from that country after the war. Several specimens were given to Mr. Andrew Hale, of Alloway, Wayne county, who planted them, and after four years cultivation, has produced a crop that equals in appearance the best approved potatoes. It is of small size, long and not large, resembling the "white Mercer," pretty closely,—with smooth skin, light complexion, and without the deep indention called "eyes," by which great loss is suffered in many kinds.—*Rochester Democrat.*

For the New England Farmer.

WHAT KILLS THE PEACH BUDS?

BY H. F. FRENCH.

My Dear Brown:—Mr. Downing, and many others of our best horticulturists, say, that when the thermometer falls lower than about 12° Farenheit, the peach buds are generally destroyed, and that, too, as I understand it, by the mere stress of weather, the mere intensity of *cold*. I have always looked upon this idea with suspicion, because it has seemed inexplicable to me, that any change should occur by any greater degree of cold, if the buds are not affected when the mercury is at zero. Water freezes at 32°, and the sap in the small twigs of the peach tree, I suppose must be frozen, long before the weather is at zero. We all know that water as it becomes solid, *expands* by crystalization, and we can readily comprehend that such expansion may rupture the sap-vessels of the wood or bud, and so destroy it. If this is the cause of the destruction of the buds, then it *should* happen whenever the sap freezes. Now I will not undertake to affirm that the sap in the peach *does* freeze until the thermometer reaches 12° *below*. It is possible that there is in the sap of the peach and in the incomprehensible phenomena of its circulation, a power of resistance to cold, sufficient for its protection to that degree. I speak cautiously on the subject, because there is no theory of the circulation of sap, which is perfectly consistent with known facts, and I set the subject down among the matters not fully revealed. The circulation of the blood of animals generates heat in some way, and possibly the circulation of the sap in plants may do the same. But generally, this does not seem to be so, for all of us who have split cordwood in the winter, know that in weather not so severe as we speak of, the logs appear to be frozen solid, and will fly open at the blow of the axe, like blocks of ice, and show the frozen sap, sparkling like diamonds.

After the sap has become solid, does it undergo any change by the increased intensity of cold? If not, *how* is it supposed, that a degree of cold 12° below zero kills the buds, when 5° below does *not?* Although there seems to be a good deal of evidence that Mr. Downing and his friends are correct as to the fact, in the more southern latitudes, yet it is otherwise at the North.

Within the past fortnight, I have examined the peach buds on many farms in the eastern part of New Hampshire. My own, and those of most of my neighbors, on the sandy plain, are all destroyed. We had the thermometer 20° below.

At Stratham, on several farms, they are nearly all destroyed, and on others most of them are injured. The degree of cold was more than 12° below at all those places, and I can discover no reason for the difference.

I was at Derry, at the nursery of Samuel Wilson, yesterday, and examined a great many peach trees, and they are perfectly sound and fresh, except upon one or two varieties of tender trees, which Mr. Wilson said, usually suffer. His thermometer *he saw* 18° below, and others near went as low as 22° below, and his peach trees within two rods of where the glass was kept, are full of fresh sound blossom buds. He has trees on the south side of his house, in warm exposures; others on the north side of hills, and others on the hill tops, and they are uninjured, with very slight exceptions. Mr. Wilson is known as perfectly reliable, and assures me that his peach crop has never failed in any instance for many years, and the cold is generally greater than 12° below, every winter. His opinion is, that the buds are destroyed, usually *in autumn*, by sudden cold weather upon trees on moist or rich land, where they *grow* late in the season. With no theory of my own to advocate, I am desirous to keep our readers *posted up* as to the facts, that by-and-by we may be able to draw the truth out of the well, in which the old proverb truly says, she lies.

Yours truly, H. F. F.

DISSOLVING BONES IN ASHES.

We give a plain, simple rule, suited to any farmer who is disposed to save and use one of the best fertilizers within his reach which is now almost universally wasted.

Procure a stout earthern jar, of about thirty gallons capacity, and a demijohn of sulphuric acid, commonly called oil of vitrol. Now gather, or save all the bones within your reach, until you have 100 pounds, which will dissolve easier the finer they are broken. Put these in the jar and moisten them with water for a day or two. Now dilute fifty pounds of acid with two or three times its bulk of water and pour one-third of it upon the bones. Stir them frequently, and on the morrow add another third of the acid and water. Stir them well, and if not dissolved sufficiently on the next day, add the remainder of the liquid. As soon as the bones are reduced, mix charcoal dust, dry peat, saw dust, loamy earth, or if for immediate use, ashes or lime may be used as a dryer, until the whole is in the form of powder, convenient for sowing by hand or drilling machine. You may apply this at the rate of three to ten bushels of the bones to the acre, sown broadcast and lightly plowed or harrowed in, so that the earth will absorb the gaseous portions of the gelatine of the bones, which is of great value, independent of the phosphate of lime; a substance greatly needed upon all the cultivated fields and pastures of all the old States of the Union.

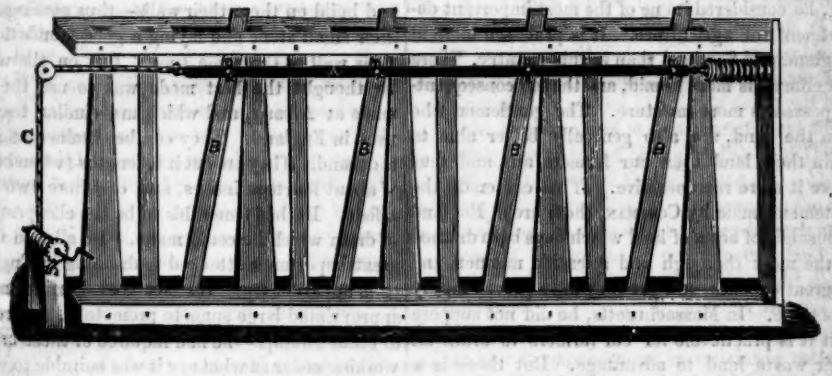
Instead of a jar, for dissolving the bones, you may use a tub, or an iron kettle, but they will soon be destroyed by the action of the acid. Upon a large scale, the best way is to have a tight stone floor, upon which, build a ring of moistened clay or loam, as is often done in slacking lime or mixing mortar. Within this place put the bones, and wet with the acid as before directed, and when ready for mixing with earth, rake in the ring and stir all up together, adding as much substance as may be necessary, or you may dilute the dissolved bones until you can spread the whole as liquid manure, which is an admirable plan for all grass lands. The purchase of the acid is not a loss, being itself a valuable fertilizer. Bones may also be dissolved by boiling in strong ley and then mixed with dryers, and sown; or put in the compost heaps with plenty of peat earth, they will cause to ferment and become exceedingly valuable. Bones are now almost universally wasted by every farmer, because he does not know how to prepare them so as to avail himself of their great value. Let him follow this short, simple direction, and it will be worth more than we charge for a thousand copies of the paper, in which we are constantly giving him such valuable information.—*The Plow.*

A JUST REBUKE.

Every friend of an improved mode of cultivation will feel obliged to Dr. GARDNER, who presided at the last agricultural meeting at the State House, for his timely rebuke to those persons who are ever crying out that there is nothing good in them. One of our wise Senators undertook to denounce them in the Senate as useless, because one speaker expressed one opinion, and another a different one. What in the name of common sense do we meet there for, but to express our experiences and observation, and to gather from them all for our own use, those modes which commend themselves to our judgment? If we knew that all held the same opinions, there would be no need of comparison, and there would be no improvement.

Was there no difference in the mode of constructing the steam engine, the paddle wheel, the cotton mill, the plow, harrow, and many other implements? Some people are never satisfied. The world either goes too fast or too slow for them; at any rate, it don't go in their path, and they go grumbling along and nudging other people off the track, even though they don't wish to travel on it themselves.

We say, unhesitatingly, that the farmer's meetings are useful. They have awakened a new spirit all over the State, and will not only result in an increase of material crops, but in the social feeling and regard for each other, which is promoted by our citizens coming into contact with each other from the various parts of the commonwealth.



For the New England Farmer.

IMPROVEMENT IN TYING UP CATTLE.

MR. EDITOR:—A good deal of time is consumed in winter in "taking care of the cattle." It is not a small job to "turn out" and "tie up" a score or two of animals, where bows or chains are used. Good farmers, who have tried other ways, maintain that the *stanchion* fastenings are the best. This method admits of great economy of barn room, as the space all clear before the cattle adds to the width and convenience of the barn floor in summer, when not needed for the herd. Where cows are fed with cut feed or meal, that part of the floor from which they eat can be cleansed of *orts* with great expedition. It must be apparent to every one, that a man with a pitchfork can *feed* forty cattle in a short time, when there is such a chance to shake the hay right along by the side of the floorway under their noses.

But my object in this communication is, to direct attention to the saving of time and labor which the use of stanchions allows. In no other way can you stand behind your cattle and secure all in the stable at once.

This may be done in the following manner: Get a strip of iron, one inch and a half wide, A, and attach it to the movable stanchions, B B B B. This should be by half inch bolts of round iron with spring keys. A rope may be fastened to the end, C, and passing over a fixed pulley near, may be brought down and attached to a lever, or to a shaft with a crank and follower.

Every one knows, who has had the charge of cattle, that they very soon know their places. They will put their heads into the stanchions more promptly if coaxed by a little hay on the floor. Now suppose your barn to be thus arranged: You push back your sliding doors and thirty cattle come in. They go to their places, put their heads through, and you give your little crank a turn—they are all fastened! Is not this better than crowding between them when they are all wet sometimes, and the more you *dig* into their stubborn sides with your elbows, and cry "*stand round*," with clenched teeth, the more they wont do it?

I can almost hear some skeptical reader say that "they wont all go in."

Well, in that case you can slip out a key and a bolt, and get in the stragglers at your leisure. If you want to leave any animals in-doors, you can disconnect their stanchions and have separate pins.

Many stocks of cattle that are only watered once a day, might be turned out from such stanchions twice, if desired.

Hoping that these suggestions may be useful to your readers, I remain,

Yours, WM. D. BROWN.

Concord, Mass., Jan. 23.

☞ In the town of West Newbury, in this State, here were raised and put up of marketable apples, last year, *fourteen thousand and nine barrels.*

TENTH AGRICULTURAL MEETING,

At the State House, March 23, 1852.

Subject,—*Draining, and the Improvement of Meadow and Swamp Lands.*

Owing to indisposition, Hon. Myron Lawrence was unable to preside at the meeting on Tuesday night, and the chair was occupied by Hon. Mr. Gardner, of Seekonk. On taking the chair he made a few remarks in regard to what has been alleged by some persons, that these meetings do not do much good; because different persons here express different opinions in regard to the same subject. He thought there should be no more of an objection against these meetings, and the object they have in view, than a diversity of opinion upon law, theology or medicine is against those professions. In regard to the subject before the meeting, he considered it one of the most important departments of agriculture. It is practised more in England and Scotland than in this country. There the climate is more humid, and the soil consequently possesses more moisture. The gentlemen who own the land, are also generally better able to drain their land than our farmers are, and thus make it more remunerative. If we can credit the statement made by Coleman, there are in England thousands of acres of land which have been drained in the most thorough and scientific manner, and at great expense, and yet they have proved highly profitable. In Massachusetts, he did not suppose that it is practicable for our farmers to drain all their waste land to advantage. But there is a great amount of land in our commonwealth now lying entirely useless, not worth a dollar an acre, which by a proper system of draining and cultivation, and at much less cost than is generally supposed, might be made more productive than any land in the State. It is therefore plain that this subject is one of much importance to the farmer. Draining is also important in its results upon the health of those who live in the vicinity of low, wet land. In these low localities, typhus and intermittent fevers abound, which are caused in a great degree by these low marshy lands. The modes of draining are various. Superficial draining will in some localities do well. He had a lot of 8 or 10 acres, bounded on the east by a range of hills, and inclining to the west, at about an angle of 45 degrees; at the bottom of the lot there was a never failing spring, the water from which inundated a portion of the lot. Five or six years ago, he had a drain dug transversly towards the west, down to the hard bottom. Besides this he made lateral drains each way. In September it was dry enough to plow and harrow, which was done. A coat of compost, 25 to 30 loads to the acre, was next harrowed in, and in the fall it was sowed down to timothy, and since then it has been among his best land, producing more than two tons of good hay to the acre. This was accomplished with nothing but superficial draining. He did not mention this as the best kind of draining, but as a kind which might be practised profitably. He thought that our bog meadows, properly reclaimed, might be made more valuable than the placers of California.

Mr. B. V. French, of Braintree, next addressed the meeting. He spoke of the importance of the subject, and mentioned several of the modes which are practised. Judge Buel, of Albany, took some very poor land, and laid down common white pine logs, with the butts up stream. Many years after, the drains were examined, and found to be discharging the water very well. Another mode is by placing pointed stones, and laying a rail on the top, and then fitting in with small stones. Others, where they have a large quantity of small stone, dig a trench, deep, and fill in with the small stone, and build on them their walls—thus getting rid of their small stone and laying a good foundation for their wall at the same time. But on the whole, he thought the best mode was to use the tiles made at Albany, and which are similar to those used in England. They can be obtained at $12 a thousand. They are cut into lengths (when baked) of about fourteen inches, and cost here two cents a foot. He had found this to be the cheapest kind of drain which he could make. He alluded to the great importance attached to draining in England, as is apparent from the fact that Parliament has appropriated large sums to promote it. In regard to cedar swamps—he had inquired of those used to working cedar at what age it was suitable to work; and their opinion was, that it should be one hundred years old. He would ask what this land was worth for the product of which the owner must wait a hundred years, and in the mean time pay the annual taxes upon it? It was not worth, at the most, more than one dollar an acre. It would be found that these swamps are most always contiguous to a pine plain, with a gravelly soil. Sometimes a well could be dug here into which the water would run from the swamp. He thought the water could be drained from these swamps, the stumps removed, and the land made fit for the plow, for from $40 to $60 an acre; and when this had been thoroughly done, he had not heard of any which was not thought worth $300 an acre. In order to make these lands good grass lands, some sand or ashes is needed. They will yield immense crops, Coleman says, in some instances five tons to the acre. They are good for celery, cabbage, turnips, and corn can be raised in some instances, with success.

Maj. Wheeler, of Framingham, spoke of his experience in draining. He began thirty-five years ago, and was ridiculed by his neighbors for it. The first thing important to be done, was to drain the land thoroughly, and to seed it down completely. He had tried many experiments; one which was successful, was to pare the land, pile up the

slices and when dry, burn them. This remedied, the need of the application of manure—the ashes supplying its place. He had got good crops in this way. Another mode he had practiced, was to spread on singly a coating of gravel. This he had done thirty-five years ago, and for thirty years he had got a good crop with nothing but a light dressing of compost every alternate year. These lands are valuable for feed for cattle, in dry seasons, when uplands fail. It used to be thought also necessary, to have a large supply of meadow hay to carry our stock through; but the opinion is now more prevalent, that it is better to reclaim our meadows and raise good English hay for our stock. Draining uplands he did not consider so important in this country as in England. He would dig his drains two feet wide, and two or three deep; put in the loose stones, and then fill in turfs with the soil on top. This would be found an easy way to get rid of the stones. He coincided in the belief, that land thus reclaimed is among the most valuable of any in our State.

Mr. Pomeroy, from the western part of the State, said it was noticeable, that most every farmer in the State has some low muck land, and that in almost every case this land can be drained. These low lands are better adapted to grass than anything else; but he and some of his neighbors had practiced raising potatoes upon them with good success; the mode was as follows. They dig a ditch round the outside of their piece of land, and run up ditches to the cold spring in the centre, if there are such. If it is then not fit to be plowed, they go on to it with Irishmen and rip it up with hooks. It is then thrown up into ridges, on the top of which they plant potatoes as early as they can, manured with plaster. The Chenangoes, which had been the worst to rot in other lands, had been raised in this way without decaying at all; they were planted quite early. The next year these ridges are levelled down, and the piece sowed with grass seed, and with a very little manure a good crop of grass can be obtained, and the land will be in a good condition. Then if it did not pay in dollars and cents, it would pay in the good feeling which the farmer will experience in seeing what was formerly an old swamp—an eye sore upon the farm—converted into a fine level, beautiful piece of grass land. He approved of deep draining, and thought many cases of failure might be traced to shallow draining. The land will settle in the centre, and in time will go as low as the bottom of the drain—unless it is dug quite deep.

Mr. Brooks, of Princeton, did not doubt the advantage of draining upon wet lands, but he said, the question is, as to the manner, depth, and distance apart of the drains. The difficulty with the open drains is that they fill up, by the bottom rising up. The best tiles for drains are the tube tiles; they will not fill up. In regard to the depth—in Northern New York he believed thirty inches was considered sufficient. This he did not think deep enough to produce the maximum effect of draining, which he considered to be to warm the land. The water tubes should be so low as not to be reached by evaporation. In regard to the expense, he believed that as a general rule, draining would not be found very profitable. In many instances it would be better for a man to buy another farm than to spend a large sum of money in draining, especially while land is so cheap as it is now. He did not doubt the effect of draining and loosening the earth to produce large crops.

Hon. Mr. Hubbard, of Sunderland, rose to inquire of Mr. French in regard to the kind of tile he used.

Mr. French replied that it was the pipe or tube tile. They can be procured at Albany, at $3,50 per one thousand feet. They are preferable to the horse shoe tile, as having a bottom to them, they do not sink.

Mr. Hubbard said that a manufactory for supplying these tile had been established at Deerfield, in this State, where they are made and sold rather cheaper than at Albany. In regard to the subject of draining, he considered it very important. He spoke of the extent of unproductive land in our State, and the vast population it might sustain if reclaimed. Agricultural products are every year rising in value, and therefore, he argued, farmers are able to expend more in reclaiming their waste land. He had known land which had produced absolutely nothing of value, to be made worth from $100 to $200 an acre, by draining, at not half that cost. When once properly drained, it becomes the most permanent productive land we have, requiring but little manure compared with uplands. We need, he said, this muck land for the purpose of reclaiming our uplands. In the former we have a large amount of vegetable and animal matter, which is beneficial to be applied to the latter. In regard to the manner of draining, he thought one error was to dig through the centre of the land to be drained, and expect the water to flow to the drain from each direction. It is a better mode to dig round the lot, and then run drains to the springs in the centre, if necessary. Some complaint is made that crops cannot be obtained from these lands. The application of sand will remedy this evil. It supplies an ingredient which is wanted for the culture of grain, and at the same time warms the land.

Mr. Howard, of Boston, next spoke and confirmed what Mr. French had said respecting Judge Buel's experiments. The material now chiefly used in New York, is pipe tile. Seneca County, in New York, is most remarkable for its thorough draining. He related the experience of Mr. Johnson, a Scotchman, who was the first to introduce

it there, and who had laid some fifteen miles of these pipe drains on his farm, and is still putting down some 1000 to 1500 feet a year. It costs him, he estimates, 28 cents a rod, and he thinks he makes no investment on his farm which pays so well as this. Stiff, tenacious soils, become less compact, and more open and friable, by being drained; under heavy rains they do not run together, and form mortar, as before, which prevents their baking under drought. Another benefit is, that crops will not winter-kill on this land as they will on many others.

For the New England Farmer.

IS LIME A FERTILIZER?

BY R. B. HUBBARD.

To decide this question, we must first fix the definition of *fertilizer*.

In Webster, I find the following definitions:—"*Fertilize*, to enrich, to supply with the *pabulum* of plants, to make fruitful or productive." "*Manure*, any matter which *fertilizes* land." "*To manure*, to apply to land any *fertilizing* matter, as dung, compost, ashes, *lime*, fish, &c."

If the lexicographer is admitted as good authority in agricultural chemistry, the question is settled. To *fertilize* is to supply the food of plants. To manure is to fertilize; and fertility is produced by furnishing the soil with vegetable, animal and earthy pabulum, or food, such as dung, *lime* and fish. Therefore lime *is* a fertilizer.

But the editor of the *Ploughman*, who seems to have a vocabulary of his own, and to have studiously expunged from it every *scientific* term, even for common things, denies that lime is a fertilizer, in *any* sense of the term. He goes further, and asserts that *lime has no more fertilizing properties than sand.*

Now, Mr. Editor, while I join issue with the *Ploughman*, in his major premise, I most cheerfully concede the minor. I admit that lime is no *more* a fertilizer than sand. But I maintain that *both* lime and sand are fertilizers,—that they are indispensable to the growth and maturity of a very large portion of the products of the soil.

By analysis the following facts have been established:—

In burning 1000 lbs. of wheat, 11.77 lbs. of ashes are left.
Do. do. do. straw, 35.18 lbs. are left.
Of these ashes, from the wheat, .96 lbs. is lime.
Do. do. do. 4 00 lbs. is silica.
Do. do. do. straw, 2.40 lbs. is lime.
Do. do. do. 23.70 lbs. is silica.
In 1000 lbs. of barley, 23½ lbs. of ashes are left.
Do. do. straw, 52.42 lbs. ashes are left.
In the former, 1.06 lbs. is lime, and 11.82 lbs. is silica.
In the latter, 5.54 lbs. is lime, and 38.56 lbs. is silica.
In 1000 lbs. of oats, 26 lbs. of ashes are left.
Do. oat straw, 57½ lbs. of ashes are left.
In the former, 0.86 lbs. is lime, and 19.76 lbs. is silica.
In the latter, 1.52 lbs. is lime, and 45 88 lbs. is silica.
In 1000 lbs. of red clover, there is of lime 27.80 lbs., of silica 3.61 lbs.
In 1000 lbs. of white clover, there is 23.48 lbs. of lime, and 14.73 of silica.

From this analysis it appears that both lime and sand enter somewhat largely into the composition of grains and grasses. And it can easily be shown that they are indispensable ingredients; that the stalk of corn could no more stand erect, without silex, than the bones of the animal frame could sustain the weight imposed upon them without lime.

Admit, what cannot and will not be denied, that these inorganic substances are indispensable to the growth and health of the plant; and does it not follow, that they constitute a portion of the food, the pabulum of the plant? Now we have the best of authority for saying that to *fertilize* is to furnish food for plants.

The hair of animals contains iron. This metal is indispensable to the growth of hair. I would not recommend to a hungry man to make a supper of iron filings; yet it cannot be denied, that, so far as iron is necessary to the proper development of this animal product, it is a nutriment,—it is to the animal what lime is to the vegetable.

The same is true of the bones. Without phosphorus and lime there could be no bones. The disease called the rickets is supposed to proceed from a deficiency in the food of the proper ingredients of bone, or from some defect in the organs of assimilation.

Now are not the bones a part of the animal frame, as well as the muscles? And is not an essential ingredient, of the former, nutriment, as well as an ingredient of the latter? The milk which the infant draws from its mother's breast, contains lime and phosphorus, which enter into the composition of the bones,—iron for the hair, and carbon, nitrogen and hydrogen for the muscles. It would be manifestly unphilosophical to say that a part of these ingredients are nutritious, and a part not.

In nature's alembic a compound has been prepared of such simples, and such only, as are essential to the healthy growth and development of the whole animal frame. This compound we denominate nutriment, and each and every one of the simples nutritious.

So in the vegetable kingdom. As lime and sand enter into the composition of plants, and are essential to their healthy growth, we feel warranted in affirming that they constitute a part of the nutriment of plants,—that they are fertilizers.

If by analysis it be found that there is a deficiency of lime in the soil, when you would sow wheat, rye, oats, clover, or any other crop in the ashes of which lime is found, you must supply the deficiency by sowing carbonate or sulphate or phosphate of lime.

When clay superabounds, sand is the best manure.

The same is true of all the ingredients of plants. The secret of skilful farming consists in finding out what the soil needs, and in supplying the same economically, or, in *fertilizing* the soil, if need be, with *sand*.

R. B. H.

GRASS SEED.

In the warehouse of Messrs. Ruggles, Nourse, Mason & Co., we have examined some herds' grass seed which surpasses any that we have ever seen before in its cleanliness and perfection of development. Under a magnifier not a foul seed or bit of chaff can be noticed; and the seeds have a brightness as though varnished. The crop was raised by some English and Scotch emigrants on some of the finest timber lands in New Brunswick. The only weed they found there the first two years was a bunch of Canada thistles, on a spot where a

family of Indians had once camped—these they pulled up and carefully burned on the cottage hearth. The trees of all kinds were cut down and the seed mentioned were produced on stems four to five feet in height, which grew on this virgin soil. It is pleasant to notice this degree of perfection in one of our most important crops.

For the New England Farmer.

COWS AND CARROTS.

BY JOHN W. LINCOLN.

GENTLEMEN:—I experienced no little surprise and regret occasioned by the perusal of a communication addressed to you, written by J. G. HOYT, under the above head, and published in the February No. of the *New England Farmer*, in which he states the opinion of a large milk farmer of Bradford, "*that carrots do not contribute in the slightest degree to increase the amount of milk in a cow?*" that his informant maintains, "that while the quality of milk may be improved by carrots, the *quantity* is not perceptibly affected." He thinks that "*the carrots, when fed out in ordinary doses, do not diminish in the least the quantity of hay* necessary for his cows; but that they serve merely as condiments." That "he is decidedly of the opinion that $3 is quite as much as a man can afford to pay for carrots to tickle the palate of a pet cow." You may judge, sirs, how much I differ in opinion from the Bradford farmer, when I inform you that for several years past, in addition to the quantity I have raised on my own land, I have purchased the surplus carrots of my neighbors, amounting to several tons each year, and paid for them $9 per ton delivered at my barn, and have then and now do believe that I paid no more than their value, not to tickle the palate of a pet cow, but to feed out to my stock. I was disposed to inquire whether it was possible I should be so greatly mistaken in my estimate of the intrinsic value of carrots. I was aware that in the table of Rham of the relative value of different vegetable substances as compared with good hay, carrots were not placed so high as by me; so also in the table of Boussingault, which has the approbation of Professor Johnston in his Agricultural Chemistry, but this was in the production of muscle. I knew that the books were full of commendations of the culture of carrots for stock generally, but particularly for horses, without one word of discouragement, so far as I have knowledge. I had full evidence that carrots were good food for swine. For several years past I have kept my swine principally on carrots through the winter months; they have been boiled, a small quantity of cob and corn meal added, and with the slops of the house, have been the only food of my swine; deprive them of the carrots, and the remainder of their food would have been insufficient to sustain life. My winter stock of swine has usually consisted of breeding sows, and they have uniformly been in such condition, that I was entirely willing that my piggery should be visited by any one disposed to inspect it, or its tenants. The usual observation has been, that "those swine are too fat, to do well in having pigs." I formerly kept my swine on potatoes, as I now do on carrots, and they have never done better than of late years.

That carrots contain much nutriment I cannot have a doubt, sufficient as I apprehend to induce farmers to grow them in considerable quantities for the benefit of their stock; that "when fed out in ordinary doses" they may so far improve the health of the animal, as to enable it more completely to digest their hay, by which to add to the covering of the ribs and the secretions of the milk vessels. That either your Bradford friend or myself was greatly in an error was most manifest. After carefully recalling to recollection what I had been able to obtain from books on this subject, my own experience, and that of others so far as it had come within my own observation, without discovering the fallacy of my former views, I was induced to inquire whether the opinions of the Bradford farmer were correct, although expressed with much confidence, and partially confirmed by the approval of two of the editors of your valuable publication, in whose agricultural knowledge the public have placed so much reliance, that it seems much like presumption to express a doubt. I was desirous of further evidence; I read the communication to Mr. Hawes, who has the immediate supervision of my farm, and requested him to take two cows then giving milk, as much alike as he could find them, ascertain what quantity of hay they were then eating, continue to them the same quantity of hay, but add to one of them a peck of carrots per day—that after a trial of a week to change the carrots to the other cow, to watch the effect carefully, and to report to me the result. He informs me that the milk of the cow eating carrots was increased one quart or more each day, on no day less than a quart, and on some days a little more; that the cow having hay alone, constantly eat up her whole allowance, and the one having carrots uniformly failed to do so, and this was the case with both cows while having the carrots—that each cow, when deprived of the carrots, at the close of each trial, fell off in her milk below the quantity given at the commencement, occasioned probably by their becoming dry preparatory to having their next calf, which is expected with both, about the first days of June next.

Having thus obtained the testimony of two witnesses that the use of carrots will not only tickle the palate of a pet cow, but if administered in ordinary doses will increase the quantity of milk, and diminish the quantity of hay necessary for food, whose competency to testify on this subject, will not be questioned, I will here rest the case, repeating that I have much regretted the publication, in the apprehension, that it might have the tendency of deterring many from growing root crops for the winter food of their stock.

This difference of opinion furnishes evidence of the importance to the farmers of Massachusetts of having a school and farm where all similar practical questions can be settled under the direction of a Board of Agriculture, to be established, as it is hoped, by the present Legislature.

Respectfully your most obedient servant,

Worcester, Feb. 17, 1852. J. W. L.

REMARKS.—We are under especial obligations to Col. LINCOLN for the pains-taking experiment which he has instituted, and for the opportunity he has afforded us of spreading the results broad-cast through the land. We still have great confidence

in carrots, and as we have, perhaps, not been fully understood, shall refer to the subject again. We will merely say now, that we regard Col. LINCOLN as one of the most careful and successful farmers in the State—a gentleman who is ever ready to advance the interests of this most delightful branch of industry, either with his hands, purse or pen; who strives to promote it as a science, yet looks at each new development with a scrutinizing eye, so that no false doctrines may be engrafted upon the system which he adopts in cultivating the soil.

For the New England Farmer.

INQUIRIES.

MR. BROWN:—Will you or some of your correspondents answer a few questions through your valuable paper.

(*a*) Is Guano profitable here, where freight costs 32 cts. per cwt. from Boston, and manure is worth $3,00 per cord?

(*b*) How much is required per acre for corn or wheat, and how is it best applied to each?

(*c*) Is it superior to common manure for root crops?

(*d*) Are the succeeding crops as much benefited by it as by common manure?

(*e*) Is the Mexican, advertised in your paper, as good as the Peruvian, according to the price?

By answering the above questions, you will confer a favor on AN INQUIRER.

Pittsfield, N. H.

REMARKS.—(*a*) No: use manure instead.

(*b*) As much as you can afford. A neighbor of ours applied 300 pounds of guano with 1500 pounds of plaster, ten bushels of ashes and three ox cart loads of old finely pulverized meadow mud. This was intimately mingled on the barn floor. In twenty-four hours it had heated a little, and was then applied, a table spoonful to each hill for corn. The earth was pushed over the mixture with the foot before dropping the corn upon it. The ground had been moderately manured—which was plowed in. This mixture was applied to eleven acres of rather light land, and the produce was 900 bushels of good sound ears of corn to the eleven acres; making, probably, forty to forty-five bushels of shelled corn to the acre. Guano should always be intimately mingled with loam, or swamp mud, and then applied if possible in moist weather. Applied to wheat, mix as above. Sow broad cast and plow in shallow.

(*c*) No: nothing is superior to good composted manure for any crop, until we are better acquainted with the component parts of both soil and manure.

(*d*) We think not.

(*e*) The Mexican guano is said to contain more of the phosphates and less ammonia than the Peruvian. If your land lacks phosphates the Mexican is best. If your cows are in the habit of chewing all the old bones they can come at, it would be one evidence that the Mexican would be the best for you.

For the New England Farmer.

NURSERY AND TRANSPLANTING.

BY A. G. SHELDON.

Were I about to select a piece of land for a nursery, I should choose a sandy loam that is free from stones. I would be careful that there should be no hollows where water would stand and ice freeze in the winter. It will be found convenient in cultivating the trees to have the land perfectly free from stones. I think it well to have the rows from 4 to 5 feet wide. This gives good room to take up the trees in one row without injuring the roots of the others. When the trees become big enough to inoculate and at the time of inoculating, it is well to cover the ground with meadow grass. This preserves the moisture in the earth, and if the weather should prove dry, as it often does in the month of August, the buds will be much more likely to live. In wet, misty weather, sift ashes on to nursery trees—this helps to preserve their health. One, two, and three years' growth from the bud is the right time to transplant the trees. In taking the trees from the nursery, always be sure that the spade is sharp, to cut the roots smooth. Be sure that you cut off the tap-root under the tree, lest you should strain the tree in pulling it up. Trees should be taken up early in the spring. If your ground is not dry enough for setting out your trees, cover up the roots with earth in a cool place where the sun will not shine on the tops; let them remain until the land is fit to receive them. When you set them out dig the hole broad enough to receive the roots at the whole length in the same direction from the trunk that they had naturally grown, and set them as near as possible the same depth that they grew in the nursery. Fine pulverized soil from the garden or from the corn hills well warmed by the sun is good to sift in among the roots. After the tree is set out, it is well to lay some flat stones around them; this will keep down the roots and steady the bodies in the wind much better than staking. If the season should prove dry, put about the trees some hay or straw by the last of June or first of July; let this remain till the first of October, then remove it for fear of mice, and put about the body of the tree compost manure. In the spring, spread this out as far as the end of the roots. If you can keep the whole of the ground plowed in the young orchard it is well; if you cannot, never let the grass grow anywhere within the length of the roots of the tree.

Particular care should be taken in pruning trees, that the top be well balanced. I have thought, sometimes, that it needed a hard-hearted man to trim an orchard, for if a branch be ever so thrifty where it is not needed to balance the tree, it should be cut off; this done, although you have nothing but a bud left in the right place, you will soon find the branch where it is needed. Very small limbs may be cut off in May. Large limbs should be cut in August. Wood, cut at this time, will remain sound and hard, although it may be some years healing over. Wash trees once or twice a year with soap suds and ashes, and scrub them with an old broom. Destroy all caterpillars' eggs in the month of March. From what I have

learned of others and the addition of my own experience, I am firm in the belief that a good apple tree set on good ground, if well cared for, being in a thrifty condition, in one year from the time it is set, may be counted worth one dollar; and if properly taken care of for nine years more, will gain a dollar each year—making a sum of ten dollars; and for the next twenty-seven years will pay the owner the principal and interest and leave him the tree at thirty years old nett profit.

In selecting the kinds of fruit, I would select some of every good kind, both early and late, sour and sweet; but Baldwins I would make the principal. I will not spend time to prove that no man is too young to set out an orchard; but I will say a few words to prove that no man here is too old to set out one. My own dear mother, when she was between 88 and 89 years old, wished me to send her four apple trees to set out in the four corners of her garden; I did so, and she superintended the setting of them out and helped with her own hands, and has lived to eat fruit from one of these trees.

By way of caution, I would say to nurserymen who raise apple trees to sell, never deceive your customers in the name of the fruit; and to farmers I would say, never set out an orchard until you are determined you will take good care of it; for that man who sets out an orchard and takes no care of it, is to the society of farmers as the backsliding professor is to the society of Christians. Worse than a cipher.

Remarks.—Friend Sheldon utters above some sound doctrines in relation to the culture of trees, and some excellent advice, which we trust none of us will forget.

PLANT A TREE.

"A thing of beauty is a joy forever."

There has been such a change in the views of our people with regard to the beautiful, as well as the profitable, that all who can control the merest patch of land, proceed at once to do something which shall both please the eye and gratify the taste. How much better this than to see the back yard cluttered with brick bats, old shoes, and the cast-off rubbish of years. A man loves his wife and children better for a pleasant prospect, especially if within the limits of that prospect they may run and gather delicious and wholesome fruits for the dessert or to offer their friends; and they certainly will love *him* better for surrounding them with cooling shades and gratifying *their* tastes. Here, then, is a moral effect not taken into account when the old boots and shoes are ostracized—the heart is sustained and made better as well as the corporeal frame.

It is a real pleasure for the child to say, "*My father* set and cultivated this tree; *my mother* planted this rose-bush and trained it about this old window-frame, where the Pewee has built its tiny nest, and baby hands have scattered the fragrant blossoms. And does not the parent reap another joy in such expressions? Think, then, of the moral influence of planting a shrub or a tree, and thus in that pleasant way add something to the moral progress of the race. Trees promote health. They break the winter wind, shield us from the summer sun, and breathe the air which we have expelled and is poisonous for us to breathe again. And then the heart that is oppressed by care or softened by affliction finds sympathy and peace in their gentle whisperings.

Dollars and cents, in this connection, we say nothing about—we desire to touch another chord. Picture to yourself what charms you may cause to cluster about your dwelling, and what true enjoyment you may realize in their creation; what bonds of affection you may implant in the hearts of your children, so that the seductions of wealth, or the blandishments of courts or elegant life, shall never alienate their love from the old rural flower-embosomed home, and then you will be thankful to him who first induced you to Plant a Tree.

For the New England Farmer.

MORE ABOUT POTATOES.

BY L. VARNEY.

Mr. Brown: — By a notice on page 48 of the current volume of the *N. E. Farmer*, it appears that T. D. Merrison, of Hill, N. H., claims to have discovered the cause of the potato rot, and a certain remedy therefor. At least, I suppose friend Merrison considers it an infallible remedy, from the fact that he has presented his claims for the "$10,000." I do not wish to infringe upon his rights, nor upon those of any other individual, but I will inform him that his theory has been in vogue several years, and, with a view to test its correctness, I tried some experiments last year, the result of which I offer for the benefit of others.

I planted a piece of ground with potatoes, on "the *north side*" of a shed, and on about half of the piece I planted "two or three kernels of corn" in a hill. In my corn-field I planted a bushel or more of potatoes, a few hills in a place, so that the potatoes were pretty well shaded. A part of the same piece was wholly planted with potatoes. On a third piece I planted potatoes at the north side of a wood-lot. None of my potatoes rotted badly. Those near the shed, and in the hills in which corn was planted, showed quite as strong symptoms of infection as those in the hills where no corn was planted. So with those in the corn-field; some hills had but few *sound* tubers in them, while in others there were but few *decayed* ones. But very little, if any, difference was observable between the potatoes growing amongst the corn, and those growing outside of it. The third piece gave similar results. Only a few infected tubers were found, but those growing nearest to the woods were not entirely exempt.

Now I think I have given the *shade theory* one fair trial, and as it did not entirely prevent the disease for which it is recommended, I would suggest that the payment of the premium be delayed *until after another trial*. I presume farmers will not adopt any theory without practical proof. If, by experiments carefully made, it is found that sheds, board fences, or corn-stalks, are a *sure* preventive,

then, if the originator of the theory can be found, let him receive the reward. Patent medicines generally yield a good profit to the inventor, but I do not believe any remedy yet proposed for the cure of this "vegetable cholera" will greatly replenish the pockets of him who offers it in market.

Prof. HOYT, in his able essay upon the "Potato Rot," recommends mowing the tops as soon as the disease appears. In 1848 we had a piece of potatoes in which the blight began to appear. I took a scythe and mowed the tops on a part of the lot, hearing that mowing would arrest the progress of the disease. The result was, that *every potato*, I think, in the hills from which the tops were cut, was *entirely rotten*, while on the rest of the piece a considerable portion were sound. Hence it appears that similar experiments produce different results in different locations,—positive evidence that the *true* remedy is not yet found.

Sandwich, N. H., 1st mo., 1852. L. V.

For the New England Farmer.

OTTER BREED SHEEP.

BY RUFUS M'INTIRE.

The facts in relation to the Otter breed of sheep, contained in Col. Humphrey's letter published in the *New England Farmer*, of the 28th of February, are new to me, though there was a breed so designated I knew as early as about the date of that letter, 1811. I had seen sheep partaking of that blood, but never saw a full-blood Ancon (a very appropriate name) till three years ago. I was driving my sheep to pasture in Hiram, Maine, and found in the road a lot of some half a dozen or more old and young. They perfectly answer the description of Col. Humphrey's. It was painful to look at them, clearly cripples from defective organization. They were small though in fair condition. Their bodies appeared round, long and tapering, small in front, as though their fore-quarters were light. One of them, I think it was the ram, beside his deformed elbow legs, had a depressed or saddle back just behind his shoulders. When I first saw them, as the road was narrow, I anticipated some trouble in passing them, but when I drove to them they took the side of the road and manifested no more disposition to mingle with my flock, than if they had been swine. I saw them two or three times afterwards that summer, three years last summer I think, but not taking much fancy to them, I made no inquiry about them. Whether they are now alive or in that vicinity I do not know.

The first I ever heard or knew about the breed, was soon after the introduction of the Merinos. My brother, at York, obtained a buck from Major Rice, of Kittery, from his flock of common sheep crossed with a Merino or part blood Merino buck. He was a small, well wooled and good bodied animal with short legs. But little was then known about Merinos in that region. The next May or June, I was at my brother's, when he had his sheep driven up from the pasture for shelter on the appearance or commencement of a storm. The sheep were driven from a quarter to half a mile perhaps in some haste. Some of the lambs two months old, more or less, were unable to keep up, and one died from exhaustion. My brother, in explanation, remarked that he understood the buck was partly of the Otter breed that were unable to travel with common sheep. I think he did not long breed from that ram, as he was desirous of infusing more of the Merino blood into his flock. My impression was then, that Major Rice obtained his ram from a brother or other relative of Col. Humphrey's in Portsmouth, N. H., and that the breed was from his flock. If I was correct, it may be there was some of the Ancon blood in the stock. I do not recollect to have noticed any sheep of that race, or the appearance of it, since say 1815, or a few years later, till about five or six years ago, I saw some in Newfield, Maine, at Mr. Oliver Moulton's, very strongly marked by length of body and legs, and other respects, except their deformity, and I think he has some now. I know not where he obtained them. They probably have not much of the Otter blood in them, and their limbs, though small and short, may not have much deformity. I have not, however, examined them critically, and in fact, did not know till I saw them in Hiram, how deformed the full bloods are.

No doubt some of your correspondents can give a more satisfactory account of this singular race of animals. R. M.

Parsonsfield, March 1, 1852.

For the New England Farmer.

THE OLD TREE'S LAMENT.

BY D. W. L.

O! trim me up, or cut me down'
The old tree sadly said;
When young I had a handsomer form,
And reared a prouder head.

Full sixty years the wintry blast
And Autumn's scorching sun
Have beat upon my spreading brow,
But now my days are run.

Beside this road I've lived and grown,
And dropped my fruit for all;
To weary souls my shade I've lent
From branches thick and tall.

But ruder hands my boughs have seized,
And tore them fierce apart;
A whip-stick or my flowers they craved,
Nor saw my bleeding heart.

To many a bird I've given a nest,
And reared their tender young;
But sadly have my limbs been bruised,
When stones were at them flung!

Old age, I know, would fain complain
And boast its pristine power;
But cease, my voice, my heart is weak,
My day is but an hour.

Behold my limbs, the hoary moss
Is thick upon them now;
I'm but a cumberer of the earth—
My bed invites the plough.

My fragment branches yet point up,
But weak and barren are;
O! trim me up, or cut me down—
I've needed better care!

APPLES.—Looking in at the establishment of the Messrs. CURTIS, this morning, at 104 Faneuil Hall Market, where they now and then sell a few thousand barrels of apples, they had the kindness to unhead several barrels for examination. Those we looked at were principally the Northern Spy, were in fine condition and selling by the single bar-

rel for six dollars, and for five dollars by the quantity. We saw them selling and receiving the cash at these prices. Those who are doubting whether they will plant another apple tree this spring, will "take due notice and govern themselves accordingly."

For the New England Farmer.

DANVERS WINTER SWEET APPLE.

Mr. Brown:—I am sorry that Mr. Hyde should feel himself called upon to *spot* the fair *name* and *fame* of the *Danvers Winter Sweet*. That instances may be found, in which this class of trees, as well as the Russet, the Pearmain, and others, have within the last *half dozen years* produced apples less perfect than before, I do not doubt; but that such productions have been general, I cannot admit. In fact, I know of trees, on which the *Eppes Sweet* (as it is called with us) have grown as fair and abundant, for three years past, as ever before. I have one tree of the kind, that has yielded four or five barrels of these apples, in each of these years; and this without any special care, except keeping the soil well stirred about it; all of which have been used in my own family. I feel, therefore, that I cannot mistake as to their quality.

With this fruit, I have been familiar for more than forty years. The stump of the original tree still remains on the Eppes farm; and as I am informed by Mr. R. Osborn, who now owns this farm, that a sucker or sprout from this stump, six or eight inches in diameter, has the marked characteristics of the original tree—showing it to be a genuine natural fruit. I do not think this the best of apples, but while the trees continue to yield as well as they usually have, within my observation, any attempt to change the character of the fruit, would, in my opinion, be extremely injudicious. I am assured that this apple has been most successfully cultivated in the State of Ohio, for thirty years, or more, and that it is there esteemed as one of their best. A fame thus acquired is not to be blasted by the failure of one man's trees, without a thorough inquiry as to the cause of that failure. Next to the *Endicott Pear Tree*—the *Paris Witch House*, and *Eliza Wharton's grave*,—I consider the stump of the *Eppes apple tree* the object most worthy of notice, within the limits of

March 13th, 1852. Danvers.

For the New England Farmer.

CRANBERRIES.

Mr. Editor:—Will you get from some of your Massachusetts cranberry cultivators, an answer to the following questions, viz. The best time to set out cranberries? will they grow well if set out upon bog 10 to 40 feet soil? what proportion of seasons do frosts spoil them? or any insects destroy them? if so, what? Do they do well to sow the seed? what is an average crop to the acre? the average price per bushel for 10 years past? Some people raised good crops on upland 7 years ago; do they continue to bear well yet? are there any barren vines? what sort is best?

As the cranberry crop is becoming one of much importance, we want more knowledge upon the subject. Some people in your State have cultivated them more than 20 years; it seems that they could give information upon the subject, and if they will, it would oblige Many.

ELEVENTH AGRICULTURAL MEETING

At the State House, Tuesday, March 30, 1852.

Subject for Discussion—*The Subdivision of Lands and Fencing.*

Hon. John C. Gray, of Boston, presided at the meeting on Friday evening, and on taking the chair announced that there was present a gentleman, well known by reputation to many in the audience, and who, he was sure, they would be glad to hear from upon the subject of agriculture. He then introduced to the meeting Capt. Partridge, Principal of the Military School at Norwich, Vt.

Capt. Partridge commenced his remarks by alluding to the great importance of the subject of agriculture, and inquired what are some of the obstacles which retard its progress. First he mentioned the prevalent custom of cultivating too large farms. This evil he thought would never be remedied until our country becomes much more densely populated than it now is, rendering land more scarce, and cultivation more thorough. He next spoke of the two grand principles of fertility, viz.: —caloric and water—and said that experiments had shown that of these two, water was the most powerful. Water, he continued, is the grand general manure, and said that we have evidence that the utmost fertility has always existed where irrigation could be practised regularly.

There is a good deal of talk about agriculture by those who know but little of the *labor* attending it. Labor is the ground work of farming; still it is necessary that this labor should be directed by wisdom in order that it be successful. The farmer must calculate and examine his lands in order to suit them to the different departments of culture. Another important consideration is the division of his lands into fields, because the enclosing of them is expensive business—especially in an old country. He gave several examples, showing how by laying out his fields in different shapes the farmer might save much expense in fencing. Every farmer, he thought, should be a practical geometrician. In this connection he alluded to the deficiency of our system of education, in affording our farmers' sons a practical knowledge in the duties of his calling. With the theoretical education of our students in all the professions, there ought to be a thorough practical education. It is a mistaken notion that the educated man must abandon labor. The reason why our farmers are looked down upon, as they sometimes are, may be found in the system which has too much existed among farmers, in educating one son at college at the expense of the education of the others. He would remedy it by thoroughly educating all the farmers' sons, for all the duties of his calling. This he thought could be done in a short time by pursuing a proper course. He would engage that a young farmer of common intelligence, with a

good common school education—could be made a good practical geometrician, and well acquainted with other requisite studies in two quarters of eleven weeks each; they might also become good civil engineers. In this way the character and standing of farmers might be elevated.

In conclusion, he spoke of the sterility of the soil in New England, and counselled a friendly feeling towards other sections of the country with which we find it for our advantage to interchange our products of the farm and other departments of industry.

On motion of Hon. B. V. FRENCH, of Braintree, the thanks of the meeting were tendered to Capt. PARTRIDGE for his address.

Mr. GRAY then made a few remarks upon the subject assigned for the evening's discussion. He alluded to its importance, and said that he coincided in the views expressed to him by a gentleman then present, that in most instances it was best to dispense with all but an exterior fence around the land, and to keep the cattle up, to practice what is called soiling them. The cheapest fence he considered to be stone walls; a cheap kind of wall, he had heard said, could be built for two shillings a rod; they consume the stone with which many of our fields are almost paved, and which it is considered excellent husbandry to get out of the way. When well laid, he considered stone walls a really beautiful fence, and mentioned especially some he had seen in Rhode Island, which were five feet high, and laid without mortar, but yet with great care. He considered it the most effectual fence. Wickersham's iron fence, which has recently been introduced into this vicinity, he commended very highly for interior fences. It can be put up at $1,25 per rod. For gardens a picket or close board fence will be found best; the former can be put up for $3 a rod, and the latter, as high as a man's head, for $4. A good wire fence, he had been told, could be put up for less than 75 cents a rod. There was another kind which in some cases he thought to be preferable to any he had named—he meant *live hedges*. Nothing could be more beautiful or effectual, if well trimmed and kept. He commended highly for this class of fences a kind of thorn introduced into this country by E. H. DERBY, Esq., of Salem, the botanical name of which is *Rhamnus Catharticus*. Some call it the *Buckthorn*. It cannot be killed by heading down. The cattle will not eat the leaf, and it is troubled by no insect; when it is headed down it will grow more thickly and stocky. It can be set out for three or four shillings a rod. For mere border, as evergreen, he commended the *Arbor Vitæ* as the best plant. It keeps clothed near the bottom; as a single tree he thought it more beautiful than the Funeral Cypress. The English thorn will not do well here. It cannot bear our dry climate. There was one kind of them he considered dangerous, and that is the *Gleditsia* or *Three Thorned Acacia*, or as some call it, the *Triple Thorned Locust*. It has a spur from which proceed three shoots; if it is not pruned it will grow out of all manner of reason, and if it is pruned it appears unsightly. It sheds its thorns, and he had known an instance where a man stepping upon one of them run it through his foot. He had exterminated all of this class upon his place.

Maj. WHEELER inquired whether Mr. Gray had found the *Buckthorn* hedge a sufficient fence against cattle, or whether they would not tear it to pieces with their horns.

Mr. GRAY thought it might be made a sufficient fence to stop them, if it was cut in and made stocky. They might injure it, but he did not think they would break through.

Mr. FRENCH, of Braintree, said he had been told by persons recently from England that the English farmers are taking down their hedges and supplying their place with expensive stone walls. It had been found a great expense to maintain and keep up these hedges. Besides giving shelter to poachers, they were found to be great exhausters of the soil. As a matter of economy, where the land will admit of it, he thought it best to have the whole farm in one lot, especially unless there was upon the land a superabundance of rock which it was desirable to be rid of. In regard to setting posts, his practice is to burn, so as to char the bottoms of the post, before they are put into the ground. Last year some white cedar posts which were put down thus charred, twenty-seven years ago, were taken up and found in excellent condition. He spoke highly of the *Arbor Vitæ* for hedges. The *Buckthorn* is also beautiful, but it is hardly a safe fence to keep out cattle. The *Washington Thorn* he had found a good fence to keep out cattle, but it was expensive to cultivate.

Maj. WHEELER preferred the *Hemlock* to the *Arbor Vitæ*.

For the New England Farmer.

PLANTING OF TREES.

MR. EDITOR:—In my former letter I gave you my opinion respecting pruning of trees; now I will make a few remarks on planting; not that I expect my plan will be carried out—for Brother Jonathan does not like much extra labor, but whoever will take the trouble, will not have to complain of trees decaying after a few years' growth, and then attribute their decay to blight or lightning. I have seen many trees partly dead on the upper branches; ask the cause, and you will be told that it is blight, but it is not so. The cause is, the roots have penetrated into some soil that does not suit its growth, or it cannot enter through some substance that impedes the roots. To obviate that difficulty, and to preserve fruit trees from decay, take this method. Cut a trench 3 feet deep, say 2 feet wide, narrowed at the top from end to end; put your earth that you dig out

first on one side, and the bottom on the other; then collect some wood, old brush, and tree toppings, and put in the bottom of your trench, with a good faggot at each end to give a current of air, put your top earth on, cave the sides on the same, let the earth settle itself, then plant your trees, and I will engage you will not have to give top dressing. As the wood decays gradually they will always have manure for ages.

P. S. Night soil is the best for onions.

S. CLARK.

For the New England Farmer.

PLOWING---DEEP OR SHALLOW.

Almost every man who takes up the pen, in these days, advocates deep plowing. However, it is unquestionably true that there are two sides to this, as well as to every other question. There are circumstances which demand consideration, in regard to the depth to which the plowman should put down the plow. These circumstances are of great importance sometimes to young farmers, who are under the necessity of making yearly payments for farms which they have purchased partly upon credit.

Take, for instance, an old farm, which has been subject to shallow plowing and long cropping and use without much manure. Such land generally has a subsoil which is in a very poor state, while the active soil is very shallow. Much land may be found of this kind, where the active soil is not more than two or three inches thick, and that is very poor; while the subsoil is cold and unfit to favor vegetation.

It is this class of farms which are, in the country, most likely to be for sale; and therefore it is more likely that young farmers, who have laid up a few hundred dollars for a beginning, will buy such farms.

Well, I am of the opinion that the unqualified advocacy of deep plowing may prove very discouraging to more or less of them. They have been employed, perhaps, where they have seen the plow put down deep into the soil, year after year, and bountiful crops in harvest following; but still have not understood the reason why the same deep plowing will not do as well every where.

Let them go on to a piece of ground which has been skimmed over to the depth of perhaps four inches, ten years before, and then cropped until the active soil is not more than two inches deep, and beneath that all is cold as death and poor as poverty, and begin their efforts by turning up eight or ten inches at once, of such soil. How will the matter end? Why, they must meet the difficulties of the case, or find a miserable profit in farming.

The difficulties of the case are real difficulties. If the farmer has only manure enough for putting in a good state eight inches deep of tolerably good soil, and he has only two inches in depth of such soil, then as his cold subsoil will require three times as much to prepare it for the active support of vegetation as the surface soil requires, his manure is only sufficient to put four inches in depth in good order. If he goes at once to the depth of eight inches, it will require sufficient manure to have put twenty inches of tolerably good old soil in prime condition. When, therefore, he finds his crops are hardly worth harvesting, because his soil would produce no better, let him look at the matter as it should be.

It is easily understood that when the manure for an acre of ground is no more than one-half an acre really needs, the prospect of a profitable crop runs down below zero. When, also, the amount of manure is sufficient to make four or six inches of soil productive, to mix it with twice the depth, or which is the same in effect, to mix it with such a depth as will reduce it to one-half, or less than half, the power or strength necessary to activity, the prospect or chance of a crop is thereby deferred. The plow and the cart must go over it again, and another dressing of manure is to follow, before the ground will give a profit to the laborer.

In all such cases, it is necessary that the depth of plowing should be equally considered with the measure of surface, in using a quantity of manure, so as to secure a profitable crop the first year. Young farmers, and all who must have an immediate profit from their labor and their appropriations of manure, will find it necessary to deepen their soil very gradually; and when they have brought every acre of their ground to have twelve inches of good, active soil, they may reckon it as of thrice the value of an acre, on which there is but four inches of good, active soil.

Indiscriminate deep plowing is, in my judgment, indiscriminate folly. I would, however, desire to put down the plow as deep as circumstances will warrant, and continue to do so, where no obstacle is presented, until every acre of ground should become a deep mine of wealth.

Another reason why I would warn every man against plunging the plow to the utmost depth at once, is that the subsoil so often contains properties which are highly injurious to the life and growth of plants. Where any such properties exist in the subsoil, it is not well to bring up any more than can be immediately overcome by the agents to be applied. If it is done, the effect must be evil. It is, therefore, a necessary part of farming prudence to do this work of deepening the soil by a gradual process.

Some subsoils are very sour. Until the acid is overcome, they will prove injurious to plants which do not feed upon acids. If such subsoils are to be brought to the surface, we may inquire, would it not be important to throw them up in the autumn, and let the winter frosts have an effect upon them? Wherever the sour subsoil is to be thrown up in the spring of the year, to be followed by a crop, lime is necessary to neutralize the acid, or, in the absence of lime, ashes may be found of great value.

Other properties may be in the subsoil which are more injurious, and more difficult to overcome. If much is thrown up, the land will be rendered nearly worthless thereby.

It should be a settled and an established rule of action never to make the soil less productive. Everything should be directed to the great object of making the soil *more* productive. When the progressive deepening of the soil causes a poorer crop, it is because there is too deep plowing for the amount of the manure, or because there is too large an amount of injurious matter brought into contact with the growing crop.

The importance of a deep soil is great, where that soil can be composed of proper substances to

give support to vegetation. All the reasons I have ever heard or read in favor of deep soils, have, in my opinion, possessed weight. But many, taking it for granted that deep plowing will produce deep soils, have sought to bring about that end so speedily, that the meagre crops which they have gained after pushing down the plow has damped their ardor, and some of them perhaps have said that "the newspapers are all full of falsehoods."

We advise them to consider the old saying,

"A little learning is a dangerous thing,"

and plunge their heads deeper into the study of that greatest and most necessary of all sciences, the science of agriculture.

There is no great difficulty in accomplishing anything that we desire to, if we only know how.

Mason, N. H., March, 1852. C. .

GRAFTING WAX.

Wax is commonly used now in grafting as being quite as certain to answer the purpose required as clay, and easier to be applied. The best mode of using it which we have ever found is in the following, communicated to the *Bangor Courier*, by Col. LITTLE, of that city, an experienced horticulturist. We have tried the plan recommended, and find it cheap and convenient. The quantity mentioned below would be sufficient to cover twenty or twenty-five yards of common shirting, while two or three square yards would be enough for two or three hundred trees. A sample of the grafting cloth described below may be seen at this office.

It will be observed below that Col. LITTLE considers it important that the *exact proportions* which he has given should be observed. We have made some of the wax from his recipe, observing the proportions given, but do not find it sufficiently adhesive, which made it necessary to add a little more rosin. Mr. PINNEO, a successful nurseryman at Hanover, N. H., informs us that he has used the grafting cloth for many years, but uses much more rosin in the proportions. He speaks highly of its excellence in preserving the limb, and of its convenience in working.

GRAFTING WAX ON COTTON CLOTH.—Inquiries are frequently made for the best grafting wax and the recipe for making it. I have procured the recipe for the best article I have ever seen, which was three years since invented by Maj. Chapman, of this city, which he uses in grafting in his nursery with good and almost sure success. I have used it two years and find it valuable; for it is very pliable, easily worked, and it contains nothing that in the least injures the scion or stock.

It should be made precisely according to the following proportions.

Recipe.—6 lbs. beeswax; 1 lb. rosin; 1 pint linseed oil. (No other than linseed should be used.) Melt them well together over a slow fire. Then with a paint brush, spread the wax thinly while warm, on one side of thin but closely woven cloth. Cut the cloth when waxed (lengthwise, as the warp is the strongest) into strips as may be wanted—say half an inch wide and about 9 inches long—according to the size of the stock to be grafted.

Grafting can be worked with these strips very readily, as no strings are necessary, and may be very neatly as well as quickly performed. These wax strips may also be used in budding trees.

I would again remind our citizens that to insure success, all *stone* fruits should be grafted before the frost is out of the ground, or as early afterwards as possible. Respectfully,

HENRY LITTLE.

For the New England Farmer.

HONEY BEES.

MR. EDITOR:—I am obliged to you and your correspondent, for the answer I have received to my inquiry as to the reason of the destruction of bees without any apparent cause, and will say in reply to the question of Mr. Stockwell, that the bees, in the two hives alluded to were found as he premised, clustered in and upon the comb in which there was no honey. It was stated in my inquiry that bees die in this way, in winter, and sometimes in other seasons of the year. But I will say in regard to the last statement, that I was misinformed concerning the cases I was then thinking of, there being, as I have since ascertained, some other cause (of course) for their death. If, as your correspondent says, (and it looks very reasonable,) "it is the *long continued cold weather* that destroys them," why would it not be good policy for all who have bees, to keep them in the cellar during the winter months, as some do already, and thus secure them from that, which so often proves their destruction?

Yours, &c., S. L. WHITE.

Groton, March 3, 1852.

REMARKS.—We doubt whether the true solution of the difficulty of which you spoke in your first communication has been given. But we have another, which accords with our own views, which shall be presented soon.

For the New England Farmer.

PRACTICAL FARMING—NO. 1.

POTATO CULTURE.

MR. EDITOR:—So much has been written upon the best method of cultivating this root, that it may seem quite unnecessary for me to attempt to say anything, but I trust I shall be excused for so doing. Last spring, when planting, I selected four rows; two of them I planted with large potatoes cut into two pieces, one piece to a hill, the other two, with the small ones, from which I had picked the seed for the other two rows. They were treated alike in every other respect, and the whole seed produced one-eighth the most, and they were smoother than those raised from the cut seed. They were of the variety known as the long red. I like medium sized whole potatoes best for seed. To plant all the little ones, seems to me too much like planting the tips of ears of corn, instead of the full ripe grain. We generally plant our potatoes on greensward turned over the fall previous, (the earlier the better,) using a small quantity of gypsum, lime or ashes, in the hill, using no other manure.

We have never been troubled much with the rot. Our soil is a rocky highland.

I do not pretend to know the cause of the rot, but allow me to say, that I regard manuring with unfermented manure, planting small, unripe seed, as among the procuring causes of this disease. Let potatoes be planted upon soil that is moderately dry, and in a condition only to produce a moderate crop, and according to my experience, your potatoes will be good in size and quality, with little or no rot.

One hundred bushels to the acre is about an average crop with us now, in good seasons, though before the disease was known, our crop has been more than double that with the same treatment; and this is one reason why I think that the rot is caused by exhaustion from the seed and soil, for our crop has diminished gradually. I am of the opinion that by planting good ripe potatoes without any stable manure, and by the use of lime and gypsum, the rot may be remedied in the course of time.

At any rate the experiment is worth trying. In conclusion, let me ask what are the constituent parts of the potatoe?

Let us know of what it is composed, and then manure accordingly. S. Tenney.

N. Raymond, Me., March, 1852.

Remarks.—The organic or vegetable substances which are found in the potato, are 75 parts water, 15 of starch and 2 of gum and sugar. The inorganic, or mineral, are potash and soda—the potash largely prevailing.

Whether it is best to plant large or small, cut or uncut potatoes, remains a question. Some of the best farmers still prefer small potatoes or large ones cut.

SCIENCE AND TAILLESS FOXES.

There are some persons who wage uncompromising hostility to science, not because it is not good, but because it *is science*, and smells of the schools. They would plow deep and receive as much benefit from it as do their neighbors; but as deep plowing is scientific, they prefer to plow shallow and gather shallow crops. They refuse to stir the soil and give it a fine tilth in a dry time, for fear such scientific operation should cause the earth to catch some virtue from the passing breeze, or steal a little ammonia (base scientific term) from the pearly dews. Nature is nature, say they, and we want none of your new fangled notions; my manure is well enough in the barn-yard, and I'll risk the atmosphere, as you call it, stealing any thing away from me. These notions remind us of the fox who lost his tail. The next time he visited his brother foxes, he addressed them thus:—"Gentlemen, behold my fair proportions! without that heavy brush I am light and active—it is useless and unbecoming, and my advice is, that you have them all clipt off!" Unlike the unfortunate fox, these grumblers about science never had any tails to lose—never had any *scientific* tails, at least, and their desire is that every body may stand on the same level with themselves, totally ignorant of the first principles of scientific cultivation.

But their doctrines are false. To be consistent, they should eat *natural* fruit; grafted fruit is scientific fruit, and ought to be bitter in their mouths. They should scorn wheels and go to mill on horseback without a saddle, and draw manure on a drag; plow with a crooked stick, and keep as close to nature as possible. They inadvertently practice scientifically a thousand things just as important as deep plowing or proper pruning, but these things have become established by the common practice, and they no longer object to them.

In spite of us, new notions *will come up*, and *will be adopted*, and the best way is to be thankful that there are some willing to think and work them out, and to adopt them good-naturedly ourselves. We shall find it far better for the world, and easier for ourselves, than to resist the tide of improvement which is setting so strongly onward.

For the New England Farmer.

FARMERS' WIVES.

BY A LADY.

As no one is expected to close eyes, or ears, while seated in a rail car, and as passengers are not always particular to speak in whispers, why of course one must sometimes hear one's neighbor's opinion of the world, &c.

This was my privilege one rousing cold day this winter. Two young ladies were conversing upon the fate of some of their friends who had left boarding school with themselves, and were married.

"And have you called on Jane N., since her marriage!" inquired the elder.

"Why no, I have no patience with such girls! Just think of her education, and the respectability of her father's family, and you know her brother is a lawyer too; and she, would you have believed it, has married a farmer! It is scandalous I declare! Call on her—no! Why I would not dare to call in the *morning*, for I dare say I should find her making butter, or skimming milk, or doing some like piece of domestic drudgery! I would not call at *night* for fear I might find her milking the cows!"

"Really, it shocks my nerves to think of the thing!"

"Yes, and it is said she might have done better than to have married this farmer."

"I have no doubt of it," replied the elder, "for I am positive she received the offer of a clerk in a wholesale store in S. 'Tis true, he is a little dissipated, that's bad, but nothing to this; compare *him* with a plow jogger!"

"But have you ever seen Jane's husband!"

"No, nor do I wish to; if he is a *farmer*, that is enough."

The reader can perhaps imagine, of course, my "pen cannot describe," with what feelings of shame and dismay, I, a farmer's wife, must have heard the above remarks.

Fortunately for me, however, I had sufficient presence of mind to see to myself and baggage, for my "plow jogger" remained at home. Lucky was this for me, for if like Cain, he carried no "mark on his brow," he might have carried it on his *hands!*

It is natural for us to inquire, what is the basis of opinions and feelings like those expressed by the young ladies referred to? And are such opinions, (which I really think were honestly felt and spoken,) correct?

Is an educated and refined lady degraded by marrying a farmer, merely because he is a farmer? Without hesitation, I reply, she is not, under any equality of circumstances. Let us suppose a case.

An intelligent and respectable farmer, (by respectable I do not mean *fashionable*, as many understand the term) looks about him for a wife. From what class shall he choose? Shall he go to the city and select from the fashionable and the gay? By no means. But shall he take one who will be no sharer of his hopes and fears, his joys and sorrows, but one who will, as I heard a man once remark of his wife, "be a very serviceable companion," because, forsooth, she will rise betimes and do all the "drudgery" and plod on till night? No—we will give the preference to one, who although she may be educated and refined, knows well that "worth makes the man."

And now is there any good reason, why a lady placed in these circumstances, should be considered to have lowered herself a whit beneath her friends, who perchance have married, one a lawyer, and another a merchant? Let us see wherein the difference consists. We will suppose the farmer possessed of a competency, or in other words, "well off in the world," to use a homely expression, and the lawyer, or merchant, as it may be, similarly situated. Where is the great, the vast difference?

"Why of course the farmer's wife has to live in the country—that is reason enough," says one, "her location excludes her from association with the better part of society, who are found in large places." True enough, the farmer and all pertaining to him must live in the country. But does this debar them from mingling with civilized, nay, refined society? The fact is, Mr. Editor, as I am a farmer's wife, I have abundant evidence, that my city friends *do not slight* me in summer, nor do they express to me their horror of the farmer's life, nor are their *nerves* weakened at all, as my house is opened for their inspection. 'Tis true, they do not so much delight to visit us in winter, but all the better for us, it leaves us the opportunity of repaying these visits.

But says one, "It is one thing for us city people to *rusticate* awhile in the country, and another, and quite a different thing, to be obliged to live there, and do work, farm work." True, but it is also one thing for us to visit you, the merchant's wife, in the city, and another to have the care of your household, for it is vain for any housekeeper who has any proper sense of the obligation resting upon her as such, to plead exemption from care, and even labor, in some degree. You visit us in the country, when nature perchance is clothed in her gayest robes; her beauty, the melody of birds, and the music of the waterfall, allure you to the open fields; this you enjoy, and rightly too, while we are preparing the viands, which, "Alas! you say for your *country* appetite, soon disappear!" Now when we visit you, we are free to attend to business or amusement as we may choose, while you perhaps are in your kitchen, weary, and disheartened, with your vain endeavors to make your new Irish girl an accomplished cook. Of course, but few women of any class have any idea of *rusticating* the year round. If one's happiness depends upon constant interchange of visits, and an unceasing routine of fashionable gaiety, one who lives in the country with these tastes, must either remain ungratified, and unhappy, or her tastes and habits of feeling must change. But gratifications of this sort are by no means an essential part of happiness. But a more serious reason, and one which is oftener brought as an objection to the situation of a farmer's wife, is this. In order to discharge her duties satisfactorily and creditably to herself and family, she must do an immense amount of hard work. By the way, this objection is viewed differently by different individuals. There are those who look upon all physical labor as *degrading*, and there are not a few in the community.

"How singular and unfortunate it is," exclaimed one of this class, not long since, "that Mrs. S., than whom no lady in New Hampshire possesses more true refinement of mind and heart, and more valuable accomplishments, should shut herself up on her farm, and that is not the worst of it; why, she actually, when her friends from D. were visiting her last summer, begged them to excuse her an hour in the morning, while she assisted in putting a *cheese in the press!*"

Now persons of this class do not despise *labor* because of the *amount* to be performed, or the time required to perform it, but they despise *work*, *labor*, in any form. They have no idea of comfort, worth or happiness, if it is associated with labor. The *laborer* is contemptible. These same individuals are not always so nice in their distinctions as they might be. They seem to forget, when plucking the tempting peach or plum from the tree, that labor planted and reared that tree.

But they never forget that it is beneath the dignity of an accomplished woman to make bread, butter or cheese. One thing, however, is certain, it is not beneath their dignity to eat them after they are nicely made.

For my own part, my perceptive faculties are not sufficiently keen to make the nice distinction, why I should be ashamed to say I make the butter and cheese, (provided it is well made,) and proud to say my husband planted and reared the tree, the fruit of which is so delicious to the taste.

But there are those who sincerely believe, that no class of women in this country, do work so hard as the farmer's wives. That circumstances often require this, it is useless to deny. But that a woman is constantly to work, and have no leisure, because she is a farmer's wife, I do deny. A man who owns a *small* farm, is not required to hire much help, so that the labor of his wife is not very great. One who owns a larger one, and is required to hire help "out of doors," if he manages as he ought, with economy and skill, will also be able to hire all needful assistance "in doors." Where a man owns a large farm and is still unable to hire all needful help for his wife, we infer that there is an exception, and is not the general rule. Bad management, an avaricious disposition, or anything which tends to increase the burden of the wife, are wrong management somewhere, and this makes not necessarily the result of tilling the soil, but these same habits and traits of character would exhibit themselves in any other situation in life, and of course the result would be the same.

Brentwood, N. H., Feb. 12, 1852.

Remarks.—"Good wine needs no bush," any more than such a communication needs words of ours. We thank our fair correspondent for her favor, and hope at some time to taste her "bread and butter."

For the New England Farmer.

WORMS IN HORSES.

Mr. Editor:—Having a colt that is badly afflicted with worms, (*a.*) I wish to inquire through you, or some of your correspondents, the best method of destroying them, and likewise the best mode of feeding (*b.*) and training colts from the time they are taken from the mare till old enough for labor.

Minot, Me. A Subscriber.

Remarks.—(*a.*) The evil you speak of is undoubtedly occasioned by some derangement of the digestive organs. Set those right and the other difficulty will probably disappear. But, as a partial remedy, give the colt cut feed for a week and sprinkle a gill of clean wood ashes upon it every other day. After this give him a similar feed once a week, and we think you will have no more difficulty, if the general health of the animal is good.

(*b.*) To answer the question, *what is the best mode of feeding and training colts?* would require more time and space than we can conveniently devote to the subject now. But briefly, feed the colt generously on good nutrient food, such as sweet hay, a few roots, and grain of any kind in small portions at a time. Give him good pasture in summer, a warm, dry shelter in winter, that he can occupy when he pleases. Feed *generously*, always, so that while the head and limbs are enlarging, the muscles may be kept full and perfect. Animals which have been stinted in food and the flesh kept low, and at the same time chilled by exposure to storms or severe winter weather, will scarcely assume that beautiful symmetry which marks those that have been well fed, and cared for. And this is not the only injury they sustain. The constitution is affected, and the spirit and energy of the animal is depressed beyond recovery. They begin their service with the symptoms of old age, and never outgrow them.

The *breaking* of a colt should be commenced before he is twenty-four hours old. Handle him frequently—make a pet of him. Bridle him young, and the winter when he is two years old, place a wagon saddle on his back, and buckle the girt loosely. Take it off at night, and after doing this a few times, add the breeching, and pursue this course with all parts of the harness, until the whole is familiar to him. Then add the whippletree and while a careful person leads him, hold back so that he may feel the pressure of the collar or breastplate gradually. If he is high spirited, so much the better—if you do not beat him. Be resolute and firm with him, but not abusive. Let him understand that you are master, but a humane and reasonable one. Treat him in this manner, and ninety-nine in a hundred will need no other breaking. *Breaking* is the word, no other will express the practice which has obtained. They have been broken, head, back and legs, until they were nearly valueless, and not from any fault of their own, but from the ignorance of the *breaker!*

Colts do not refuse to work from any disposition not to earn a living, but because they do not understand what is required of them. They need to be educated, and this must be done gradually—not in a day, or a month, but months. These are only a few brief hints—study the animal yourself, and you will learn what course is required to be pursued.

For the New England Farmer.

PREPARATION AND APPLICATION OF MANURES.

BY J. W. PROCTOR.

Mr. Editor:—Next to deep stirring and thorough pulverization of the soil, is the judicious application of manures, to insure successful culture. In most of our fields, that have been under culture the last fifty years, such applications are indispensable. How these manures shall be secured and prepared, are questions that present themselves to every cultivator. Perhaps, in no way is there occasion for the application of science, strictly so called, more than in the preparation and application of manures. The minute subdivision of manures, and the complete intermingling them with the soil, is the first thing to be attended to. This I have so often seen illustrated, by the gardeners and growers of vegetables, in my vicinity, that I cannot doubt, that the nearer the farmer imitates these operators in their preparations for the reception of the seed, the more certain will he be of an abundant harvest.

One of the greatest mistakes made in the application of manure, is the putting them upon the lands in a crude and immature condition. More than half their virtue is lost by such mistakes. The best cultivators rarely use their manure, until it has undergone a preparatory process of about one year. They believe that much is gained by such delay in use. This is peculiarly the case with Mr. Mason, of Beverly, the gentleman to whom I have heretofore referred, as the most successful grower of crops in our county. Situated on a farm with soil of naturally ordinary quality, with vigilance in the collection and preparation of his manures, he has made his acres yield an income of more *than three hundred dollars*, with a continued improving condition of the soil. And this, in reference to nearly all the vegetable crops generally cultivated, such as onions, cabbages, beets, carrots, medicinal herbs, &c., &c. Such an income from our grain crops is not to be expected; but *one hundred dollars* an acre may readily be obtained from these—when the lands are properly prepared.

Manure may be classed under the heads of *animal*, *vegetable* and *mineral*. The excrements of animals, and decayed animal substances, are used for this purpose. Decaying vegetables, not consumed by animals, yield manure. Lime, gyp-

sum, bones, &c., are illustrations of mineral manures.

In no department of rural economy are our farmers more deficient, than this of manures. In none is there more room for beneficial illustrations, by well-conducted farm schools. Different soils, and different crops, require rules adapted to each. To ascertain what these are, is the grand desideratum in good farming.

At a late meeting at the State House, it was said there were 100,000 farm establishments in the State of Massachusetts, and that there was scarcely one of these, in which there was not lost annually at least $10 for the want of proper care of the manure. This when spoken of in the aggregate, makes the large sum of *one million of dollars*. But can there be any doubt of this? Let any one examine the premises where is kept only a horse, a cow and pig—and they will readily see how there could be made twice as much manure as is ordinarily done. Here then in a very small establishment is a loss of more than *ten dollars*—much more, then, will be the loss proportionally, in large establishments.

On all those farms, where convenient coverings for the animals and their droppings are wanting, summer and winter, it is fair to say, that full one-half of all the nutritive qualities are necessarily wasted.

Much is lost, also, in the preparation of the compost heap, away from the field to which it is intended to be applied. The expense of transportation neutralizes, in a great measure, the benefits that might otherwise be derived. Much is lost by the application of manures upon or near the surface. If buried to the depth of 5 or 6 inches, there is no danger but the fibres of the tenderest vegetables will so extend as to use it up—and when laid upon the surface, the most nutritious and volatile properties of the manure soon evaporate and are gone. All manures will lose more than they gain by keeping above ground. Manures move in all directions when in the ground, but more upwards than downwards—therefore, there is less danger in covering them, than leaving them uncovered; and there is never hazard in perfectly fining and commingling them with the soil. This I regard as the main-spring of successful culture. P.

Feb., 1852.

For the New England Farmer.

FARM SCHOOLS.

BY JOHN GOLDSBURY.

Mr. Editor:—I wish to say a few words more upon Mr. French's plan of establishing, in some suitable place, *a model and experimental school in agriculture*, in which the whole science, in all its branches, may be thoroughly taught and learned. It is very evident, (at least, to my mind,) from what has already been said in a former communication, that the science of agriculture cannot be successfully taught or learned in any of our present institutions,—neither in our higher seminaries of learning, nor in our common schools. If it is to be taught scientifically, thoroughly and systematically, (and there is everywhere great need of such instruction,) it must be taught in an institution established expressly for the purpose, and possessing all the requisite means and facilities for accomplishing the object. It will not do to have agriculture "go snacks" with other studies in any of our existing institutions, and to come in for its share of attention; nor to have it stand second in importance to any other branch of science; but it must be made the first, and stand at the head and alone; and all other studies must be made to contribute to its success.

The plan of Mr. French appears to be eminently well calculated to accomplish its object, for two reasons, 1, because it is a *feasible* plan; and 2, because it is an *economical* one.

1. I call it a *feasible* plan, because it is so simple, so practicable, and so easily accomplished. It is attended with no great difficulties or obstacles. It needs only to be clearly understood, to commend itself to every one's mind, as *the* plan, the only sure and successful one, which, if universally adopted and carried into effect, will be attended with *certain success;* and all that is needed to carry it into effect, is the hearty co-operation and support of all the friends of agricultural education. If they could all be united in support of this plan, and be led to act in concert, they could easily secure for it the desired aid and assistance of the State. Massachusetts, ever liberal in the bestowal of her favors, and always the first and foremost in supporting other institutions of learning, would not niggardly refuse, when properly requested, to grant a sufficient sum to establish an institution designed to benefit the great mass of her laboring population, the very bone and muscle of the State. More especially, as this request for aid would come from farmers, without distinction of sect or party, for whom she has heretofore done so little, and to whom she is highly indebted for her present wealth, prosperity and happiness.

2. I call it an *economical* plan, because it can be so easily and cheaply carried into effect. Mr. French's plan contemplates the establishment of only one model and experimental school at the outset. One school is as good as fourteen, (the number of counties in the State,) to test the usefulness and success of the plan. This plan, therefore, does not require the expenditure of large sums of money, till its usefulness and success are made certain in the minds of all. But, in all other plans, vast sums of money must be expended at the outset; and this expenditure must be renewed from year to year. It will require no trifling sum to establish a professorship in connexion with all our colleges and higher seminaries of learning, or even to appoint a sufficient number of lecturers to give instruction in all our common schools. These vast expenditures will be continually increasing from year to year, till they mount, "like Pelion upon Ossa," to an enormous sum, and become very onerous to the people of the State. And it is easy to see, that these plans would, in the end, prove an entire failure, which would be death to the cause of agricultural science. J. G.

Warwick, Feb. 21, 1852.

Remarks.—The plan for a model farm school as set forth by our associate, Mr. French, struck us at the time as the most feasible and safe, of anything that we had heard of or seen described. We are glad to find his views so ably sustained by our correspondent above.

[DWARF PEAR TREE.]

SELECTION OF PEARS.

SIX BEST PEARS ON QUINCE STOCKS.

Dwarf pear trees occupy but little space, and afford delicious fruit. They will almost grow in a flower-pot. Even among the garden beds their shade is not particularly injurious,—in a dry season, perhaps it is beneficial. The mother or daughters may cultivate them with ease, if the father and sons are too much occupied with other affairs, or have not the taste. Those who wish to plant a few trees only, are often troubled to select these few from the long lists in the catalogues of the nurserymen. We have, therefore, selected the six pears which we should set, if we desired to put down only that number.

1. Louise Bonne de Jersey.....for Fall.
2. Vicar of Winkfield.....for Winter.
3. Beurre Diel.....for Fall.
4. Passe Colmar.....for Winter.
5. Glout Morceau.....for Winter.
6. Duchesse d'Angouleme.....for Fall.

We will give a brief opinion of each from Downing. The *Louise Bonne de Jersey* is one of the best new autumn pears, fair and glossy, exceedingly juicy and well-flavored. In this country it succeeds admirably. Fruit large, a little one-sided. Skin smooth and glossy, pale green in the shade, but overspread with brownish red in the sun, and dotted with numerous gray dots.

The *Vicar of Winkfield* is occasionally a fine table pear. Its great productiveness, hardiness and fine size, will always give it a prominent place in the orchard, as a profitable market, cooking pear.

The *Beurre Diel* is, in every respect, a first-rate fruit in favorable situations. Its vigor, productiveness and beauty, have made it already a general favorite.

The *Passe Colmar* is a fruit of the first quality; and has become one of the most popular winter pears in the middle States, on account of its excellent flavor, vigorous growth and abundant bearing.

The *Glout Morceau* is perfectly suited to our climate, bears excellent crops, and should have a place in every good garden. Its name signifies *greedy morsel.*

The *Duchesse d'Angouleme* is a magnificent dessert pear, sometimes weighing a pound and a quarter. When in perfection, it is a most delicious fruit of the highest quality. Loves a warm, dry soil.

SIX BEST PEARS ON PEAR STOCKS.

1. Flemish Beauty.....for Fall.
2. Golden Beurre of Bilboa.....for Fall.
3. Fulton.....for Fall.
4. Seckel.....for Fall.
5. Dearborn's Seedling.....for Very Early.
6. Beurre d'Aremberg.....for Winter.

In good soils and open situations, the *Flemish Beauty* is certainly one of the most superb pears in this climate. At page 9, volume I., of the *Farmer*, the reader will find a beautiful engraving and full description of this excellent fruit.

The *Golden Beurre of Bilboa* is of a fine golden color, relieved by a little russet, and is certainly a beautiful early autumn pear of the first quality.

The *Fulton* is a native of Maine, is very hardy,

bears every year abundant crops of nice small, gray russet pears, which, if picked early and ripened in the house, are of very excellent quality.

The *Seckel.*—Mr. Downing's praise of this is very liberal: he says, we do not hesitate to pronounce this American pear the richest and most exquisitely flavored variety known. The tree is the healthiest and hardiest of all pear trees, forming a fine, compact, symmetrical head, and bearing regular and abundant crops. We add that the Seckel may be grafted on large trees, and soon become productive.

The *Dearborn's Seedling* is a very admirable early pear, of first quality. It bears most abundant crops in every soil, and is one of the most desirable early varieties. Ripens about the middle of August.

The *Beurre d'Aremberg* is certainly one of the first of winter dessert pears in our climate. It is a fine, large fruit, very high flavored, bears most abundantly, and always keeps and matures, with perhaps less care than any other winter fruit in the house. When in perfection its flavor is not unlike that of the pineapple.

In the above you have a list of twelve pears which we consider the best, if you wish to set only about that number. If you wish to extend it, a much larger list may be found in the monthly *Farmer* for April. In making the selections, we have consulted two or three of the most distinguished horticulturists of New England, and therefore have great confidence that the list is a good one.

For the New England Farmer.

EFFECT OF COLD ON PLANTS.

At this season of the year, the fruit trees, especially the more tender kinds, are exceedingly liable to receive injury by the change from cold to a warm temperature. By this cause not only is the fruit culturist exposed to the loss of his fruit for the year, but even sometimes to the loss of the tree itself, or to great injury arising to it.

The spring will usually be more forward in proportion as the winter has been more severe. That is, if the temperature of the opening spring is precisely the same in two successive seasons, that degree of temperature will bring forward vegetation more quickly after a winter of greater cold, than after a more moderate one. The reason of this is, that cold quickens the sensibility, and excites the irritability of plants, which is the reason why vegetation is more rapid in a colder climate than in a milder region. When plants have been long exposed to a lower temperature than usual, the sensibility is so increased, that if they become suddenly subjected to a powerful heat, their too excessive increase of action induces inflammation, which proceeding to mortification, causes the death of the plant; or in a less degree, causes the destruction of the fruit. The effect being similar to the sudden application of heat to the human limbs when frozen. This is considered to be the reason why seeds germinate more readily, and at a lower temperature in the spring than in the fall. Barley is more easily malted in the spring than in the fall, from the same cause. And vines that have been exposed to the winter's cold without shelter, put forth earlier than those which have been housed.

This increased irritability of plants after exposure to cold was shown by an experiment made in England many years ago. Dr. Walker made several incisions in a birch tree, from which the sap flowed on the 26th March, with the thermometer at 39°; but it did not flow on the 13th with the thermometer at 44°, or 5° higher. The reason of which was supposed to be that on the night preceding the 25th, the thermometer was seven degrees lower than on that preceding the 13th—and the greater cold excited the irritability of the tree to a greater degree. And it has been found that this irritability is greater in the morning than later in the day, from the same cause.

Those plants, therefore, that are kept housed during the winter, should be occasionally exposed to the cold, if possible. And seeds should be kept in a cool place through the winter, to increase their irritability, and thus promote an earlier and more vigorous germination.

This is a practical knowledge, within the range of common experience, as the knowledge of the similar increased sensibility in persons who are frost-bitten and brought to a hot fire. But I am inclined to think that the knowledge is not turned to much practical account. Perhaps, in general, it is the practice to keep seeds in a cool place through the winter. But the fact might in some other cases be quite important in the operations of husbandry,—as in transplanting trees in the spring; which, supposing the temperature to be nearly alike in two corresponding periods of different years, at the thawing of the ground and after, should be transplanted earlier after a very cold winter than after a moderate one, because if the spring weather is about alike in the two years, the trees will come forward earlier after the cold winter than after the other. And it will not be a good practice to cover any plants or trees through the winter that are able to stand the climate without cover; and those that are not able to withstand the coldest weather, and are therefore covered, would be benefited by exposure to occasional cold, to as great a degree as would be safe for them.

As the season for transplanting trees is near at hand, I have thought that this hint might be profitable to some of your numerous readers, though the fact on which it is based has not escaped their notice. For though the gardeners and those who have need to keep it in mind always or periodically, will not overlook it, yet farmers who are setting out orchards might not, in all cases, attend to it.

J. A. B.

For the New England Farmer.

NATURE'S FREAK.

A small greening tree on the farm of Capt. Wm. Tilson, of Halifax, was sawed off and Baldwin scions were inserted on the stock, which on fruiting bore Baldwin apples the first year, of good size and quality, but has since borne Greenings, and them only, for several years. Can any one explain the cause?

Et C. H.

East Bridgewater, March 8, 1852.

For the New England Farmer.

EDITORIAL MILL.

Mr. Editor:—Some of your correspondents, away up here among the hills in the country, have almost made up our minds not to send any more communications to your *mill* to be ground out, as our grists remain so long in your editorial hopper, that when they do come through the mill, they appear to be quite tasteless, senseless, and out of season. It is in vain to tell us, that you cannot prevent this delay, on account of low water, the want of a larger hopper and a more powerful mill, when we frequently witness such long communications in your columns. It is the duty of a good miller to see to it, that no one man should have more than forty bushels ground at any one time, while another man is waiting for a single bushel to be ground for the use of his family. We hope, however, that these honorable gentlemen will still continue to favor you and the public with their communications; but we hope, in mercy, that they will not attempt to elbow every body else out of the world, because they happen to be in it. To be serious, we would like to see a greater degree of brevity and precision observed in the use of language both on the part of editors and their correspondents. "Words fitly chosen," *multum in parvo*, "are like apples of gold in pictures of silver." The way to make room for all, is for each one to be contented to occupy a brief space. If any one has anything to communicate, let him do it in language the clearest, strongest, briefest possible; but let him stop when he has done. Mount Grace.

Warwick, March 29, 1852.

Remarks.—Our correspondent's reason for believing that communications sent us become "tasteless, senseless and out of season," is one of the reasons which induces us frequently to defer articles, to wit, that there may not be too much on the same subject crowded into our columns at the same time, or within a brief period. But there are many other reasons which might be given for occasionally deferring them. With every desire to please, we sometimes find it absolutely necessary not only to defer articles, but what is still more unpleasant, to withhold them entirely.

For the New England Farmer.

WINTER WHEAT IN MAINE.

That winter wheat can be raised to advantage in Maine seems now to be the settled conviction of very many farmers who have for the last few years raised it with good success, the yield in many cases being considerably greater than that of spring wheat. The crop last season was in some sections injured to some extent with rust, yet as a whole was highly satisfactory to our enterprising farmers who have engaged in it, zealously determined to prove whether it could be raised here or not.

Numerous instances can be given where from 30 to 40 bushels of prime winter wheat have grown from one bushel of seed. A neighbor of mine raised 100 bushels of fine quality from 4 bushels, a yield of which no farmer need complain.

There was a large crop put into the ground last fall, by many farmers in various sections of the State, which so far as heard from looked very promising, when snow came, and has completely protected it up to the present time, so that the risk of its being winter killed is very small. Should it continue to succeed, as at present, which there seems no reason to doubt, a large amount of money will be retained at home, which has formerly been sent abroad for flour, thus materially increasing the farming interests of Maine.

W. Tabor.

Vassalboro', Me., 3d mo., 1852.

TWELFTH AGRICULTURAL MEETING,

At the State House, Tuesday, April 6.

Subject,—*The Subdivision of Lands and Fencing and Farm Buildings.*

The meeting on Tuesday evening, April 6, was thinly attended, owing to the very unpleasant state of the weather. Hon. B. V. French, of Braintree, presided, and on taking the chair, spoke in general terms of the necessity of fencing, a department of agriculture which has been recognized and practised from the earliest days. In New England he thought we had been in the habit of cutting our farms into too small lots, but the manner of enclosing must vary according to the nature of the land. Land which is not fit to plow, such as woodland or pasturage, must be cut up into smaller lots than that fit for cultivation. It is estimated that on the average but 6 acres out of 100 in our own State is fit for the plow. Such lands as are fit for cultivation should be in as large lots as can be made convenient. In regard to sheep, it had been found that if you put ten sheep into a ten acre lot, pretty well fenced, the most of them would find their way out the first night or the next day. But if you put one hundred sheep into a hundred acre lot, with an inferior fence, and drive them slowly round the pasture so that they may have a look at the fence, they will remain in the field contented. A small number of horned cattle in a small enclosure would also be more breachy than a large number in a large enclosure. For an economical farm, where the land will warrant it, he prefers but one enclosure—but would have that substantial. In placing farm buildings he would have them placed further back from the road than is now the custom. He always prefers stone for fences where it can be obtained, and would prefer to draw it even two miles, than to depend upon a common post and rail fence. Mr. French in this connection, alluded to his remarks at the last meeting upon the subject of hedges, and repeated them in substance. In regard to setting posts—a gentleman from New Bedford had told him that he had examined and found the frost to penetrate the earth to the depth of 2 1-2 feet. He then set his posts 5 feet 2 inches—twice the depth of the frost; and the result had been, that he had not been troubled with having his posts moved by the frost. Where stone is scarce Mr. French thought the wire fence might be introduced to good advan-

tage. The wire might be used with white cedar posts, and be made to last a long time. If this fence looks too bare to please the eye a row of *arbor vitæ* might be set out in front of it. For a design for an economical farm he said he had never seen any so perfect as the lands at Mount Vernon, the home of Washington. He closed by alluding again to the opinion that it is best to have but one enclosure on the farm, and to keep the cattle up and soil them.

Mr. TUDOR, of Boston, spoke of a kind of fence which he has introduced on his lands at Nahant, with the object of changing the climate. In 1825 he built a cottage there, which was in the midst of a cow pasture, in a very exposed situation; the winds would cause the doors of his house to slam, and would blow out his lamps. He then built some lattice fences, made of laths, from 16 to 18 feet high, which he estimated excluded about two-thirds of the wind. This produced a great change. Where before no trees would grow, he can now raise, under shelter of the fences, the finest varieties of fruits and flowers. On the 13th of March, he sent to his man at Nahant, to examine the ground in different places to see what effect these fences had upon the frost entering the ground. The first land from which returns were made, was in a situation exposed to the N. W. wind, and showed frost to the depth of 24 inches; where the wind was intersected by one of these lath fences; the land having a southern slope—the frost was 7 inches deep; where it passed through three of them from 10 to 13 rods apart, 1 1-2 inches and in a large part, no frost at all; all this land was in a state of open cultivation. This experiment shows that the wind in passing takes the heat from the earth; and these fences exclude the wind while they leave the air to pass over the land. In regard to the influence of these fences upon the atmosphere, he could describe it no better than by saying that when he is cold on his other land he goes into his garden to get warm. They are very effectual in keeping out marauders, and can be built quite cheap. A fence which he built in 1834 is now standing, and in good order.

Mr. SHELDON, of Wilmington, next took the floor. My remarks, he said, are not intended for the gentleman's front yard or the lady's posey garden, but for the farmer who produces for the great family of mankind—beef, pork, mutton, every kind of grain, all sorts of vegetables and fruit. If he had a meadow to fence, he should dig a ditch; the mud carried on to the upland will pay the labor. If he has stony land where he wishes to raise an orchard, dig out the stones and lay them into a wall. The soil under the wall will be worth more to the roots of the trees than any other part of the field. If he has a field where there is no stone, let him build a rail fence. Seventeen years ago, Mr. Flint, of North Reading, and myself, made an agreement with Hon. Jas. F. Baldwin, of this city, to build a rail fence on each side of a new road between Woburn Centre and North Woburn. This fence stood 14 years before I ever noticed a post or rail much out of place. Since then on dry, sandy land it has failed considerable; on the low ground it is good yet. I should think it is now worth to the owner 40 cents per rod. The cost of the fence when built was 56 1-4 cents per rod. This fence was made from cedar slabs.

There are large portions of our land in Massachusetts that may be profitably fenced with what I should call a living fence; not by thorn bushes, but by sowing on the poorest dry land, in a line where you wish for a fence, pitch pine seeds; on cold flat lands white pine seeds or sow the seeds of any tree such as the nature of the land is calculated to produce—such as Acorns, Chestnuts, Beechnuts, Horse Chestnuts, White Maple and Sugar Maple. The main point is to sow that which is natural to the soil. Be sure to sow all these kinds thick enough. This may be done by running a plow along and sowing in the furrow and at the outer edge of the furrow. The pines will be likely to produce you a sufficient fence in ten years, and in thirty years you would be likely to have noble rows of trees all around your farm wherever you had sown seeds, and if at any time you wished to point out the boundary of your farm to any person at a distance from you, it would be easier and pleasanter to point them to a long row of tall trees, than to a little hedge of thorn bushes. This kind of fence I would recommend to railroad corporations. Let each man who has charge of a section of the road sow the seeds inside of their old fence. I would also recommend to new railroad corporations where the line of their road runs through, to take one rod of extra land for the purpose of raising trees for fence on the sides of their roads. If these trees should not grow near enough together to stop cattle, it will be easy to cut rails the right length from tree to tree, placing the ends against the trees and they will soon grow tight.

I think I have forgotten to mention the Locust, which would be one of the very best among the hard wood, and Red Cedar among the Pines.

Maj. WHEELER, of Framingham, believed that where rocks can be obtained stone walls are the cheapest kind of fence. He agreed with the idea that some farms are generally cut up into too small lots. The only advantage in thus sub-dividing the land is to get rid of the stone. He does not think it profitable to keep cattle up and soil them; it costs too much labor, and is too expensive, and he had found that cows would give more milk by being allowed to go into the fields and select their food for themselves. He estimated that a cow will eat 200 lbs. of green fodder a day, and it is too

expensive work to cart this from the field to the barn. He approved of planting southern corn alongside of the pasture, so that it might be used for fodder when the feed begins to grow short. In conclusion, he said a few words commendatory of constructing cellars under barns—and thought the quantity of manure might be doubled by them.

Mr. SHELDON said the southern corn would make more fodder, but it would not produce so much milk as our common corn.

A gentleman inquired if this corn fodder was considered as good for cows as pasture feed.

Maj. WHEELER said that his experience was, that cows would give more milk upon pasture feed than upon any other. This corn fodder he considered next best to grass. The fodder should be given to them at a proper time and in proper quantity. They should have enough so as not to fret after more.

Mr. MOTLEY agreed with the last suggestion. His custom is to feed his fodder to his cattle in the morning. He gives them a good breakfast of it, and then lets them range the pastures to fill up. If they are fed at either noon or night they will acquire the habit of coming to the place where they are fed, and wait and fret for the fodder. He considered corn stalks admirable food for cows. He would cut them early and keep them growing. The wire fence he would recommend as an economical fence, but he thought it had not been tried sufficiently long to test its durability. He gave the items of the expense of a fence of this discription put up by him some four years ago and which cost, complete, seventy-three cents a rod. One advantage of this fence is that it is invisible at a certain distance. He coincided with Mr. Tudor's remarks upon the influence of the lattice fences upon the climate, and cited from his own experience, an instance where a similar result had been attained by clearing a small patch of land, in the centre of a wood lot.

The hour for adjourning having arrived, Mr. FRENCH made a few appropriate remarks upon the importance of the meetings and the good they have and do accomplish, and the meeting was then adjourned to the second Thursday evening of January, 1853.

For the New England Farmer.

ONION MAGGOT.

I noticed a short piece in your paper of the 13th ult., written by Ira Brown, requesting to know if there had been any effectual remedy discovered to kill the onion maggot. I would just say that if you make a strong decoction of tobacco, and sprinkle your onions once a week, the maggot will not trouble them, for it is a flyblow which the fly deposits on the top, snug to the growing onion; the tobacco prevents the fly from blowing the top. I saw it tried last season with success, only applied three times.

DANIEL LIGHTON.

Rochester, N. H.

For the New England Farmer.

THE POTATO ROT.

MESSRS. EDITORS:—Recent numbers of your journal, as also in fact all the agricultural papers, contain numerous articles upon the plague which seems to have affected the whole potato family. Among so many conflicting theories it would be well if some primary cause could be fixed upon to guide one's researches. My object in writing is to inquire whether the opinion has most obtained, that it is the effect of the climate, or owing to some insect, as I conceive the matter now to have narrowed down to this. It is the opinion of many that both have combined to produce the result.

In a late number of the *American Agriculturist*, in an article from a lady, it was attributed to the ravages of the Baridius Trinotatus of Say.

From her statements and what has since fallen under my own observation, I am induced to think that we have at length hit upon the true source of the disease, affected, it may be as I have before said, by some peculiar state of the atmosphere. Any information upon this deeply interesting and important matter that it is in your power to offer would be doubtless received by your numerous readers with satisfaction and pleasure.

Yours, &c., W. F. T.

Greenburgh, April, 1852.

REMARKS.—The opinion is generally entertained in this section that the potato rot is caused by atmospheric influences.

For the New England Farmer.

TRANSPLANTING TREES.

BY S. A. SHURTLEFF.

MR. EDITOR:—Much has been said about transplanting trees, and when to do it and how to do it. If all who have written on this subject are correct, it appears to me that it matters but little when or where it is done, or how it is done. But I must beg leave to dissent from the multitude, and speak from actual experience.

I should by all means transplant apple and pear, maple, oak, birch, beach, catalpa, and all other forest trees, except evergreens, in the fall; and peach, quince, cherry, plum and apricot in the spring, as soon as the frost is out of the ground. Evergreens, such as hemlock, white pine and pitch pine, should be planted on the first of May. Firs, spruces and cypresses, in June or July. In all cases we should see to taking up the trees, and also to keep them from the sun, so as to preserve the small roots or mouths; and we should also see to setting them out, and not leave them to hirelings. In all cases I would have large holes dug, so that each root may have a good soft bed, and in good soil. If trees are to be planted on high ground and clay soil, they should be set deeper and more loam put around them; but if they are to be set in low ground, they may be put on the top of the ground, and earth from high ground of good quality put around them in sufficient quantity to keep them from blowing about, and to cover the roots well. For in high ground the earth is washing away, and in low ground it is always filling up; and if the roots are too deep in low ground, they will rot; if not set deep in high ground, they will dry and blow over.

The quality of the ground should always be ta-

ken into consideration, whenever an orchard is to be set out. When trees are about to be set, it would be well to make a liquid to dip the roots in of clay and cow dung, of equal parts, and put in water sufficient to make it about as thick as soft-soap. After it is well mixed, dip or soak the roots of each tree fifteen minutes in the composition before setting them. In this way all of the wounds will be dressed, and good rich food will be provided for the young roots. Farmer Jones has set large orchards in this way, without losing a tree.

Too much care cannot be taken in putting out trees or taking them up. I have seen some nurserymen chop off the long roots, and it appeared if they could get up a tree, it mattered not whether they had roots or not, or whether they lived or not, so long as they got their pay for them.

In all cases good rich soil should be put around the roots, and also they should be kept clear of grass and weeds. In some cases it would be advisable to put stones around the roots, to keep them from blowing over, or being loosened by the wind. S. A. S.

Spring Grove, March, 1852.

SOME REMARKS ON SUBSOIL PLOWING.

BY HENRY F. FRENCH.

Dear Sir:—Most men believe in *Progress*, in all arts, sciences and pursuits. They believe that they may, themselves, yet learn something, even about the matters of which they already know most. No mechanic believes that his machinery, however complicated or curious, is perfect. He has still some further object, some *Progress* in view.

If his engine now runs thirty miles an hour, he will have it run sixty; and since he has got it to *run* and to *swim*, he is next proposing to make it *fly*.

But the farmer—has he the same hope, the same faith? A few weeks ago, in the course of a conversation upon the importance of a State Commissioner of Agriculture for New Hampshire, among several farmers, one of them,—a man counted sane, and even intelligent among his neighbors, objected,—that it was a useless expense, that there was *nothing more to be learned about farming matters*, and that our farmers knew as well fifty years ago how to raise corn as ever any body will know! Now this, whether it come from a slave in a rice-swamp, or one of "the intelligent yeomanry of the Granite State," as our politicians usually style their audience, is pure unmitigated *ignorance*, and yet we occasionally encounter these obstacles in the way of improvement—these old stumps in the way of a clean furrow!

I rejoice to find in the *Journal of Agriculture*, a high stand taken for progress, and a fearless war waged against errors and prejudices, which their age, even, has failed to render respectable.

There are some farmers, not many, still left, who scout all idea of improvement—who believe that the art of husbandry was born, as was Minerva from the head of Jupiter, *full-grown!*

Dogberry, in the play, says that "to read and write comes by nature," and some men seem to think the same of all knowledge pertaining to agriculture. They put their hand to the plow and *look back*, to see how their grandfather laid his furrows, instead of *forward*, to see how well they can lay their own.

I am, Sir somewhat a believer in this new heresy of subsoiling; I say *new*, because I suppose the use of the subsoil plow to be, yet very limited. There are many parts of New England where the use of it would seem almost impossible, such as the stony granite soil of our interior towns, but still, there are parts of almost every farm, where sub-soiling would be found beneficial.

The process may be stated, in a sentence, to be the breaking up of the subsoil without bringing it to the surface, by running a subsoil plow in the furrow of the common plow, to the depth of from one to two feet below the original surface. The benefit to the land is first in loosening the subsoil so as to allow of the ready escape of the surface water, and the free admission of air to the roots of the plants, and this is literally of vital use, because many of our crops, as the potato for instance, perish in a very short time, from a surplus of water in the early part of summer. The permeability of the earth to air, is very surprising. Ewbank, in his "Hydraulics," states that if a well, in which there is a pump, be sealed tight, upon the sides and top, and the pump be worked, the air will pass down through the ground and bubble up in the bottom of the well! I should think the neighborhood of the well must be pretty thoroughly subsoiled before this would occur; but there can be no doubt that a free circulation of air about their roots, is essential to the growth of most cultivated plants, and nothing so fully obstructs this circulation, as stagnant water. Air *rises* readily through water, but does not pass through it *downward*, without considerable pressure.

Again, loosening the subsoil allows the roots to strike deeper, and besides permits the *upward* passage of water, by *capillary attraction*, and so affords a double protection against drought. The rising of water by capillary attraction is perfectly illustrated by a piece of sponge, laid upon a plate filled with water. The water will rise into the sponge and moisten it throughout, contrary as it might seem to the ordinary principle, that water maintains its level. This same attraction is relied on in the use of flower pots, with holes in the bottom, through which, the water, poured into saucers in which the pots are set, rises in the earth to the surface. But this principle does not apply except to materials of a certain degree of compactness. Water will rise by capillary attraction, in glass tubes, of which the diameter of the bore does not exceed the twenty-fourth of an inch. The principle has similar limitations, as applied to the earth. Fill a flower pot with No. 1 *shot*, and water will not rise in it on this principle, nor will it rise through clean gravel stones of the same size, except as it may pass through the particles of the stone itself. There may be, therefore, cases where it would not be well to disturb a stratum of very coarse sand or gravel, lest it should be rendered so open as not to hold water by capillary attraction. But this must be a rare and peculiar case. Usually the subsoil is too compact for the free passage of water, either upwards or downwards. A stratum of pure clay or compact gravel, is almost impervious to water, and the top of the ground above it might be parched so as to destroy vegetation, when two feet below, it would be filled with water, which would gladly rise to the sunlight, if

some friendly subsoiler would break up the wall between. Almost any kind of soil may be rammed so hard that water can scarcely penetrate it, and the constant plowing of old fields to a given depth, has this very tendency, to make the subsoil impervious.

Few farmers would expect a crop from a soil of the depth of a common furrow, say five or six inches, if there were a sheet of cast iron underlaying their whole fields at that depth, so that no water could pass down in the spring rains, and none come up in the heat of summer, and no root strike beyond that depth. We should have no hope from such a soil. It would be drowned in the spring and baked in the summer.

I have, myself, used the subsoil plow only upon lands where it is usually supposed to be least beneficial—on a sandy soil so light, that with one yoke of oxen it was run sixteen inches deep. In the severe drought of 1849, I found a manifest advantage in its use, especially upon my corn-field. The drought was so severe as to sear the grass and the leaves of maple trees which had grown well for two years, standing in sward land by the road side, and yet the corn, within ten feet, on the subsoiled land, did not roll once in the whole season, even at mid-day, and there was scarcely another piece in the neighborhood which escaped serious injury. My corn land was manured upon the green sward, which was then turned in with a large plow drawn by two yoke of oxen, followed by the subsoiler drawn by another yoke. I have about nine acres of land which has been subsoiled, on which I have raised all our usual crops, and have growing most luxuriantly, a large number of fruit trees, and I have full faith that whether the season be wet or dry, the process has been essentially beneficial to every acre.

Aside from the mere *mechanical* effects of subsoiling, the *chemical* action of the air upon the subsoil, and of the particles of soil upon each other, by change of relative position, is very valuable.

Governor Hill, late of New Hampshire, by the way, a man of progress, and one of the most successful and ardent Agriculturists in our State, called attention, through his "*Farmer's Monthly Visitor*," to the fact that a granite subsoil, from any depth, soon becomes fertile from the action of the atmosphere, and light and heat. Thrown out from our railroad cuttings, it soon becomes covered with a luxuriant growth, in many cases, of *red clover*.

But I have not time or space to pursue this subject further. Trusting that you may find around you, to sustain you in the manly stand you have taken for the improvement of agriculture, many men like my good old friend Isaac Hill, who was *never too old to learn*, and had, therefore, always something to teach, I remain

Your friend, HENRY F. FRENCH.

—*Journal of Agriculture.*

☞ Crowded as England is with a hungry population, forty-five per cent. of her soil is not under cultivation. Yet the proportion of cultivated to uncultivated land, is higher in England than in any other country in Europe. In Russia, less than one-fifth of the soil is under cultivation; in Sweden, only one-seventh; in Austria and Holland, one-fifth; in Switzerland, one-fourth; in France, fifty-four hundredths. There is really no *need* of emigration. In England, as appears by a parliamentary report, there are sixteen millions of acres, wholly unproductive, that might easily be made productive. The reason why these acres are permitted to lie unimproved is, that as soon as they are enclosed, and *before* they can be sufficiently reclaimed to produce a paying crop, they become subject to tithe and tax. Hence, only men of large capital dare undertake the task, and they prefer to invest their capital where the return is more speedy and more certain.

For the New England Farmer.

ASPARAGUS AND ITS CULTIVATION.

BY B. F. CUTTER.

This vegetable succeeds best on a deep, rich, sandy loam, where water never can collect in puddles during the winter season. The ground should be prepared for setting the plants by digging trenches four feet apart from centre to centre, and one foot deep by one wide. Well-rotted manure should then be put in to the depth of three or four inches, and mixed and covered with soil. The roots should then be placed in, crowns up, and spread out in their natural position, at the distance of one foot apart on each side of the trench, making two rows in one trench, or 100 plants in 50 feet. They should also be put in alternately, so as not to be opposite each other. They need not at first be covered more than an inch or two, as the soil will naturally get back fast enough during the season, if the ground is well cultivated and kept clear of weeds. With proper cultivation it will do to cut the third year after setting. The beds are prepared afterwards by cutting and clearing off the tops late in autumn, and turning the soil away from the roots with the plow as near down to them as can be done without injury; then put on a good coat of manure, and turn the soil back with the plow, and let it remain till spring, when it should be well mixed by spading or plowing, and harrowing, and the ground levelled with the rake.

The above is the common mode of cultivation, but some do much more. Salt is very good for asparagus, and may safely be used in its cultivation in considerable quantities, by sowing on top of the ground.

B. F. C.

Pelham, April 9, 1852.

REMARKS.—We are obliged to friend CUTTER for his communication and the fine bundle of asparagus roots which came with it. We shall endeavor to do justice to both.

For the New England Farmer.

POTATOES.

The best remedy I have found for the potato rot, and I have had several years' experience in this matter, is to plant early in dry "broke up" ground, without manure or any other stimulant. I had a fine crop of excellent potatoes treated as above last year. They are much better for table use than when raised with manure. The following year I dress the ground high and plant with corn, and get a heavy crop. The next year "lay down" with wheat or oats and grass seed. By this rotation the land is left in good condition for grass for several years. Try it. JERE. FULLERTON.

Raymond, N. H., March, 1852.

For the New England Farmer.

EXPERIMENTS.

BY S. FLINT, JR.

Mr. Editor:—Having seen in a late number of the *New England Farmer*, a few extracts from a letter addressed by me to a friend in Washington, I am emboldened to send a few lines for publication, if you think them worth the room they will occupy in your valuable journal.

It seems to me that farming, both as a science and an art, is yet in its infancy in the United States. When a child first begins to reach after objects, it will stretch out its hand as readily to grasp any thing at the distance of six feet as six inches; and will continue to do so, till it learns by repeated experiments, that some objects are within and others beyond its reach. It surprises nobody that children so often make these futile efforts, but such conduct in a man of mature age would be justly considered good evidence of insanity. What then shall we think of the farmer, who year after year cultivates his fields, with the expectation of a good, or at least of a renumerating crop, and often finds his hopes are blasted! who stretches forth his hand for the harvest and behold! it is not there! Is it not conclusive evidence that he is making experiments! that he has no settled system, that he is beating about like a boy by a trout brook in *hopes* he shall get a bite? What our farmers want at the present time, more than any thing else, is system. We work enough, many of us work too hard, but our blows, like those of the boy who first begins to chop, are many of them lost because they are not well directed.

The question very naturally arises, how shall we get a system? how can we know beforehand where to strike and what to do? Evidently, in no other way than by repeated experiments. Every farmer must make his business a study; and whenever he succeeds in obtaining a good, renumerating crop, he might make a record of it. It would serve as a guide to himself in his future operations; and if communicated to the public, by means of agricultural journals or otherwise, it might furnish hints to others to "go and do likewise." It is not necessary that every man should do this, but it is important that many should; because when a fact in farming is well established, every body will recognize it; just as every school boy admits the fact, that the diameter of a circle to its circumference is nearly as 7 to 22; although he may be entirely ignorant of the geometrical demonstration that proves it. Every farmer who engages in this great work of reducing his business to a system, should keep an exact account of the expense, the mode of producing the amount and value of his crops.

Great crops are sometimes raised and paraded before the public, that cost much more than their value. As, for instance, a man will take a piece of worn out land, and at a great outlay, will get a good crop. The result is told; but before he can be awarded much praise as an agriculturist, he should prove that his boasted crop, or the succeeding crops, will pay the expense; for he is the best farmer, all other things being equal, who keeps his farm in improving condition, and at the same time obtains the greatest income at the least expense. And these experiments should be continued through a great number of years.

Suppose, for instance, that a man were to make the trial, to see whether hay fed to sheep or two years old steers were the most profitable. The experiment of a single year might sometimes be in favor of sheep; because it often happens, that sheep and wool are high in the market when beef is depressed; and for opposite reasons, it might in other single years be more profitable to feed cattle. So the farmer, like the astronomer, must come at some of his facts by a long course of observation; while others can be established more readily. Scientific investigation has already done something; and every intelligent farmer knows that a crop cannot thrive without proper nourishment, any more than his boys can.

"For we shall still take similes
From 'boys' as often as we please."

The fact being well established, that every crop needs suitable nourishment, which nobody at this day will deny, then the great question is, in what manner shall this supply be obtained and imparted to the plant; and this is a question that cannot receive a uniform answer; for in some locations it can be obtained more readily in one way, and in other places in a different way. Consequently, every man must look about and judge for himself. If he sees a neighbor increasing his amount of manure by the use of swamp muck, let him look round on his own premises, and see if he has not, within suitable distance, as good a deposit as his neighbor. I have often wished that I had such a place, and after digging out all the holes that I could conveniently come at, concluded I should have to give it up; although within 40 or 50 rods of my barn there was an inexhaustible supply; but which I supposed could not be made available, because in order to get at it, it was necessary to cross a field of moist land that would be very materially injured at such seasons of the year as is usually devoted to this purpose. Having occasion however to cross it with wood, the first of sledding, the thought occurred to me that it might be dug in the summer or fall, and drawn on a sled without any difficulty; and at a season of the year when it could be very conveniently done—and I intend to make the experiment. S. F.

Lyme, N. H., 1852.

Remarks.—We shall soon find room for your other article. Hope to hear from you again.

THE PIG.

Few animals yield less waste matter, after being dressed for market, than the pig: every part is useful, as a sailor would say, from stem to stern; the head for baking, the tail for roasting. Every part is made palatable and useful—feet, minister's face and shanks, are all admired, when properly "soused" and cooked. The rich and poor alike admire a meal from the pluck and portions of the loin; the intestines make excellent envelopes for sausage meat; the blood makes a savory pudding, and the bristles a brush for purposes "too numerous to mention." The pig is a short lived but useful animal; and "works his own passage" through life by mixing muck and making manure for his owner. At death he invariably goes squealing out of his pen into "lard, and pork, and bacon," and is soon off on a voyage at sea in pursuit of a whale.

We never liked the long-legged, slab-sided, apron-eared grunters, except for the race course, for the reason that they eat too much food to keep them in decent working order. They might do for a "show" occasionally as fine specimens of a living skeleton, but for porkers give us the short-legged, small-headed, quiet and contented pig, round as an apple and hearty as a buck, with sufficient good sense to know when he has eat enough and where to go and lay down to be rubbed or curried; and, withal, as Uncle Ziba used to say, a "*hog*, with a remarkably *good disposition*."—*Vermont Watchman.*

SCARIFYING THE SOIL.

Thousands of the failures which take place among merchants, trades-people and mechanics, are occasioned by "making haste" to be rich. They are not content to pursue a plain, practical system which yields them annually a limited but certain profit, in conducting a small business in the best possible manner. They gradually enlarge the circumference of their operations, spread their capital over a large surface where they can find no return, or only in diminished amount, and thus through the very magnitude of their performances, defeat the object in view—that of making more money—lose their labor, sink their capital, become discouraged and disgusted, abuse the business and knock off for another trial in something else!

We have been led to these remarks and those which follow, by having directed to us several queries in the *British North American*, published at Halifax, Nova Scotia, in relation to scarifying the surface, and making that operation answer the purposes of plowing, and the usual method of tillage, in order to get the land into a suitable condition to produce good crops. An implement called the *scarifier*, is used to considerable extent in England, instead of the plow, but we are not aware that it has ever been introduced *into use* in this country. If deep plowing, and even sub-soiling are necessary, it is certain that the mere cutting and loosening the surface will never answer the purposes of a good deep tillage.

The farmer is just as apt to run into wrong notions as any other class. He wishes to reap large crops in some other way than by the usual process, some short cut to success, whereby much labor may be saved, and still be able to store full garners in the autumn. So he plows shallow and goes over much ground, and manures on the same principle, and under this process he finds his acres constantly grow poorer, and himself becoming disgusted with farming as a poor thankless business. The text of our provincial friend is as follows:—

"We cannot afford either the labor or the manure necessary for plowing."

There are certain pasture lands, and some of them producing excellent feed, which are altogether too stony for the plow. What is best to be done with such it is difficult to decide. They could not be scarified much better than plowed; and it is next to impossible to bring such pastures into sweet feed by any process short of plowing. But of one thing we have no doubt—and that is that the sod must be broken so that it will eventually become pulverized and the earth beneath loosened, to admit the air and warmth, before good feed can be obtained. It is a practice on burnt lands where there are many stones, to hoe in the rye. The process is somewhat slow, but excellent crops are obtained under it. We think of no method but this to try on your *very rocky* pasture lands. Take a few square rods and break with the hoe as well as you can, adding a mixture of guano, ashes, plaster and loam, sand, or meadow mud, intimately mingled; keep an exact account of cost, and judge as nearly as you can of the benefits derived. This will test the matter whether the rocky old pastures can be wrought upon with profit.

But the difficulty of our friend does not seem to lie any more with the pasture land than with the mowing fields; and *here* we have no doubt whatever as to the best course to be pursued. That course is to increase the manure heap until you have enough to give each acre at least fifteen ox cart loads of good manure, and before applying it to plow the land eight to twelve inches deep, spread the manure and cover it in with the cultivator or harrow; sow on twelve quarts of herds' grass, one bushel of red-top, and six or eight pounds of clover seed, to the acre, and you will realize more actual profit from it than you can in any other way. But you reply that you have thirty or forty acres that ought to be plowed this year. Very well—if you have manure for only ten acres, *work that well*, and let the other thirty go to pasture or any thing else. You will get more profit from the ten than by spending your labor and scattering your manure over any larger portion of the whole.

To attempt to cultivate more than you can manage well, is the same hazardous process that the merchant indulges in when he expands his capital too much. It is the rock upon which thousands of merchants, and tens of thousands of farmers, split. They attempt too much—and the temptation grows out of owning or holding too much land. Having the land, they suppose they must cultivate it, and are gradually led into the most imprudent and ruinous modes of cultivation.

AGRICULTURAL GEOLOGY.—We have received from some unknown hand a small book with the above title. It is made up of seventeen articles or brief essays upon the subject mentioned above. We had read them as they appeared from time to time in the papers, and thought them among the best articles we had seen on the subjects discussed. They are written by JOSIAH HOLBROOK, and published by Fielding Lucas, Jr., Baltimore.

For the New England Farmer.

CONGRATULATIONS—COWS—YANKEE INVENTIONS.

BY B. B. FRENCH.

My good friend and brother, you are really doing your brother-men most essential service. You have at last found the very niche that you were born to fill, and how much your native State has lost by not sooner discovering your capacity to stir up and enlighten the farming interest thereof cannot now be calculated! "Better late than never," is an old, but an excellent adage, and now you are in the right place "go ahead" and make up for lost time!

You have asked me, more than once, to write something for the *Farmer*. You know very well that I am neither practically or theoretically a farmer, and therefore I cannot write anything worthy of publication. You and Henry F. French got me into one alliance, if I may so term it, by recommending our friend King, of the *Journal of Agriculture*, to *entice* me into his columns, and he succeeded. I have written him two letters, such as they are, and do not intend to desert him, if I can find anything in and about Washington that I deem worthy of his excellent journal. So you see I am *booked* for him, and it is hardly possible that I can find enough here for you both. If I do, you shall have your share. I read both your papers as religiously as I do my Bible, and I think it *is* a pity if I cannot pick up ideas enough on agriculture from *one* to write now and then an article for the *other!* And even now, while I think of it, I will give you a little of my own experience about a matter upon which I read an article in your brother King's last journal, which came yesterday, headed "Knapp's Patent Cow Milkers." Mr. King condemns that invention, and if, as he says, "it is nothing else than the boy's straw," he condemns it very justly. I suppose not one New England boy in one hundred arrives at the age of twenty, without being taught to milk. I was so taught, and have not forgot it to this day. I used to aid in milking my father's cows. Well, about, say thirty years ago, an article went the rounds of the newspapers describing a new invention for milking, and speaking of it in the highest terms. It was, if I remember, the insertion of silver tubes in the orifices of the teats, and thereby drawing off the milk. It not being in my power to procure silver tubes, I resorted to an experiment that none but a Yankee boy would have thought of—I went out and shot half a dozen robins, and of the bones of their legs made tubes, and the cows had not been in the yard ten minutes, after my tubes were ready, before I had the milk running from two or three of them. We all pronounced it a great discovery, and flattered ourselves that milking by the pressure of the teat with the hand was an exploded idea! The new method had been followed less than a week, I believe, when it was discovered that the cows were fast failing to give their usual quantity of milk, and if I remember correctly, some of them began to show symptoms of disease. At any rate the tubes were abandoned, but not until the cows were materially injured; and we all came to the conclusion that the nearest the milking machine *resembled the mouth of a calf in its action, the better it was for the cow!* And I now predict, that if any one undertakes to milk cows in any other manner than by the pressure of the hand the cows so milked will soon be ruined.

In one of your papers some time since, you recommend the use of sugar instead of salt petre, in curing hams. A lady of your acquaintance, who imagines she knows something about curing hams, is curious to know whether you have ever *tried on* your recommendation. She expressed the opinion when she read it, that hams cured without saltpetre, would not be easy of digestion for delicate stomachs! Please enlighten us.

Winter still lingers with us. The grass is beginning to come up, and the buds on the trees are swelling, but nothing except the crocus, which seems to place winter at defiance, gives any immediate prospect of bloom. The apricots, which you have seen in full bloom here in February, do not look as if they would bloom this month. I expect spring will burst upon us in a few days, as it sometimes does, like midsummer, and we shall all be roasted. Now we are sitting by our winter fires, and the church was more uncomfortably cold to-day than I have known it this winter, although the coal stoves were red with heat.

Faithfully yours, B. B. F.

Washington, D. C., March 7, 1852.

REMARKS.—A pressure of articles already on hand when the above was received, is the reason of its being delayed. We thank our old and steadfast friend for the warm sympathy and kind expressions in a portion of his letter which we deem sacred to friendship and the still nearer and dearer ties existing between us. They lead us back through the long years that have departed, to scenes and enjoyments which never can be erased from the memory.

Our correspondent is diffident about his farming knowledge; but one thing is certain—he has "*tended a saw mill*" more than we ever did, and must be qualified to write a luminous chapter on that subject. We can assure the dear black-eyed lady, the friend and companion of our youth, who has always been doing good, curing the hams, educating the children, &c., that we have used no saltpetre for some years in curing meat of any kind, and that the old Virginia, Maryland, or Westphalia hams, do not come quite up to the tender, juicy deliciousness, of those that are frequently upon our table.

HOW CITIES EXHAUST THE FERTILITY OF LAND.

There has been enough of the elements of bread and meat, wool and cotton, drawn from the surface of the earth, sent to London and buried in the ground, or washed into the Thames, to feed and clothe the entire population of the world for a century, under a wise system of agriculture and Horticulture. Down to this day, great cities have ever been the worst desolators of the earth. It is for this that they have been so frequently buried many feet beneath the rubbish of their idols of brick, stone and mortar, to be exhumed in after years by some antiquarian Layard. Their inhabitants violated the laws of nature, which govern the health of man and secure the enduring pro-

ductiveness of the soil. How few comprehend the fact that it is only the elements of bread and meat, evolved during the decomposition of some vegetable or animal substance, that poison the air taken into human lungs, and the water that enters the human system, in daily food and drink! These generate pestilence, and bring millions prematurely to their graves.

Why should the precious atoms of potash, which organized the starch in all the flour, meal, and potatoes consumed in the cities of the United States in the year 1850, be lost forever to the world? Can a man create a new atom of potash or of phosphorus when the supply fails in the soil, as fail it must under our present system of farm economy? Many a broad desert in Eastern Asia once gladdened the husbandman with golden harvests. While America is the only country on the globe where every human being has enough to eat, and millions are coming here for bread, how long shall we continue to impoverish ninety-nine acres in a hundred of all that we cultivate! Both pestilence and famine are the offspring of ignorance. Rural science is not a mere plaything for the amusement of grown up children. It is a new revelation of the wisdom and goodness of Providence, a humanizing power which is destined to elevate man an immeasurable distance above his present condition. To achieve this result, the light of science must not be confined to colleges; it must enter and illuminate the dwelling of every farmer and mechanic. The knowledge of the few, no matter how profound, nor how brilliant, can never compensate for the loss sustained by neglecting to develop the intellect of the many.

No government should be wanting in sympathy with the people, whether the object be the prevention of disease, the improvement of land, or the education of the masses. One per cent. of the money now annually lost by reason of popular ignorance, would suffice to remove that ignorance. —*Anon.*

For the New England Farmer.

PROFITS OF POULTRY.

Mr. Brown:—As I have seen many statements in regard to the profits of poultry, I made a trial on mine the past year, ending March 1, 1852. I commenced with 15 hens and a protector. I raised 265 chickens, which I sent to Boston market, excepting 30 of the pullets, which I kept through the winter. My hens laid, from March 1 to October 1, 804 eggs; from October to March, 1284. Total, 2088 eggs.

Whole amount sold from hens	$142,37
30 hens at 62½ cents, retained	18,75
One cord of manure	4,00
	$165,12
Cost of keeping	93,61
Net gain	$71,51

My hens are a cross of the Cochin China and our native breed. I will give you my method of keeping. I feed my hens once a day with dough made from corn and cob meal mixed with boiling hot water, and once a day I give them oats. I give them some kind of animal food three or four times a week. Also, keep something constantly before them for making the shell.

Truly yours, Timothy B. Boyt.

Southboro', March 10, 1852.

For the New England Farmer.

THE HISTORY OF THE APPLE TREE.

BY S. P. FOWLER.

[CONTINUED.]

The first agricultural work published in this country, was entitled "Essays on Field Husbandry," by Jared Elliot, printed in 1760.

But little was written in this country on the cultivation of fruit trees, prior to the year 1817. At this period Mr. Coxe wrote his views of the culture of fruit trees in the United States of America. Dr. Thacher published his American Orchardist in 1821. These treatises, although valuable, particularly the one written by Dr. Thacher, recommend the open and severe method of pruning, prevalent in England, by cutting out a good portion of the branches, in order to admit the rays of the sun, and a circulation of air. This system, adopted by English cultivators, and practised in this country for many years, is now to a considerable extent abandoned, it being not necessary in our sunny climate. Thirty years since, we were accustomed to derive much of our information in regard to the cultivation of fruit trees from English writers on this subject. In regard to the time of pruning, cultivators disagree. And to show this disagreement, we shall give the opinion of some of them. Mr. Hovey, in his horticultural operations for February, 1850, published in his magazine, says pruning orchards may be commenced now, choosing good weather for the work; by beginning now, much valuable labor will be saved. It should all be accomplished before April. The *American Farmer's Encyclopædia* says, trees *ought not* to be pruned in February and March; this is the season when most trees bleed most copiously and injuriously. It causes canker, the wounds turn black, and the bark, for perhaps several feet below, becomes equally black, and perfectly dead in consequence of bleeding. Downing says, we should especially avoid pruning at that period in spring when the buds are swelling, and the sap is in full flow; it brings on a serious and incurable canker. From moderate pruning, which alone is generally needful, says Kenrick, June and July, during the longest days of summer, is the *very best time*, for wounds of all kinds heal admirably at this period. Thomas says, thinning out the heads of old trees, or heading back for grafting, may be performed in autumn or winter. Lindley, in his Theory of Horticulture, says, the season for pruning is usually midwinter, or at midsummer; the latter, for removing new superfluous branches; the former, for thinning and arranging the several parts of the tree. Manning, in his book of fruits, says fruit trees, in this latitude, *should not* be pruned in the fall or winter, or before the sap is in motion, as they are at those times exceedingly apt to canker. The proper season for pruning, we consider, is immediately upon the swelling of the buds, or expanding of the leaves, as at this time the sap being in vigorous motion, the wounds soon heal over. Cole, in his fruit book, says moderate pruning should be done in June, July, or August, though it will answer very well till December. If trees are pruned in July, August or September, the wood will become hard, sound, and well-seasoned, and commence healing over. We should prefer October, November, or even December, to the spring, which is the *worst season*. Loudon says, for all the operations of pruning,

which are performed on the branches or shoots of trees, it would appear the period immediately before, or commensurate with the rising of the sap, is the best. Barry says, we are not permitted to be very definite on the point of pruning. In western New York, we prune apple, pear, and other hardy fruits, as soon as our severe frosts are over, say the latter end of February or beginning of March.

Dr. Thacher says, in general the months of February, and March, have been considered as the preferable season for pruning. Forsyth says, the best season for pruning apple trees in England, is in the month of April or May. Whenever the apple tree needs heavy pruning, says Jaques, the work may be done at any time from the latter part of autumn till early in spring. Col. Pickering's practice was, to prune in the spring, when the buds had scarcely begun to swell, and ending before the expansion of the leaves.

We see from the many quotations we have made from persons who have written upon the subject of pruning, that a great variety of opinions prevail. We are of the opinion, it may be done successfully, at most seasons of the year, if care be taken to perform it well, and immediately apply a composition, or paint, perhaps several times repeated, in some cases, to the wounds caused by the operation. With some persons, the rule is to prune when they have leisure, and their tools are sharp. For many years, fruit trees have been pruned in Massachusetts, in the spring months. This was the universal practice of our ancestors. It can be done perhaps more conveniently at that season, than at any other period. It is in the spring that we devote the most time to the cultivation of our fruit trees. In summer and autumn, farmers are busy with other occupations. In the winter months, should there be mild weather, fruit trees can be pruned to advantage. When performed at this season on trees planted in ground laid down to grain or grass, you do not injure the crops, as you would seriously do, if you pruned in June. We have never pruned our trees more easily or safely, than when we have done it on the hard crust of a deep snow, in February or March. After all that has been said or written upon the proper season for pruning, farmers will continue to prune very much as they have done. Much can be said, as we have seen, on both sides of the subject. S. P. F.

Danvers, New Mills, January 23, 1852.

[TO BE CONTINUED.]

For the New England Farmer.

STONE BARNS.

Mr. Brown: — I wish to obtain through your paper some information concerning stone barns, built of common field stone, laid in mortar of lime and cement. I wish to ascertain whether the walls will accumulate moisture sufficient to injure hay. Knowing that your paper has an extensive circulation, I thought it might fall into the hands of some one who has a barn of this description, who could impart the desired information, and you will oblige a subscriber. A.

Winchester, March 22, 1852.

☞ The gem cannot be polished except by friction, nor man perfected but by adversity.

BRIEF HINTS.

Potatoes designed for planting, and especially for early use, should be taken from the cellar and spread upon some floor where the sun may fall upon them part of the time. They will vegetate much more readily, and can be brought to maturity earlier by so doing. A few could be started in the hot-bed or by placing them in a warm situation and covering them with horse manure.

If you want good radishes, spade in a good quantity of manure, so as to make the ground light and rich. They will then grow rapidly, and of course be tender and nice. You can have them in this way, without the trouble of mixing half sand with the soil, as some old cultivators contend.

In setting young trees, after the holes are dug, make a little "*hill*" in the hole upon which to stand the tree. Press and work it down so as to fill up perfectly among the roots on the under side, that there may be no vacuums or hollows.

Recollect that the high price of butter is owing, in a great measure, to the vast amount of poor butter. If it were not for the tons of rancid, worthless butter, we should not hear of its being sold at 37 1-2 cents per pound. The remedy is very simple, *work out all the buttermilk!*

Farmers are mostly agreed in the opinion that small potatoes are just as good for seed as the larger ones. But as the "eyes" are the germ of the plant, and as a small potato may have nearly the same number of these that the larger have, care must be taken not to seed too highly. High seeding will certainly produce a small crop of small potatoes.

For the New England Farmer.

RENOVATING OLD APPLE TREES.

BY DANIEL LELAND.

In your paper of the 28th of February last, your correspondent, S. P. Fowler, speaking of old cider apple trees, says "the question is often asked what can I do to renovate these old trees, and make them produce good fruit? Will grafting them answer a good purpose, and will scions do well in these old limbs? In answer I would say, as a general rule, it is labor lost to graft these old tops."

I know not the writer of the article, nor do I know whether he has come to the above conclusion from theory or practice; the writer of this article has come to a different conclusion, and my opinion has been formed from practical experience.

With the exception of two years, 1803–4, I have spent my days upon a farm left me by my father, and he was early engaged in raising an orchard; consequently I came in possession of one raised by my grandfather and father. Many kinds of fruit raised by them was not as good as some kinds which have come into notice in later years.

One very fine table apple, which had its origin in Sherburne, bore well for a number of years, and was highly esteemed by all, did well until 1810;

since that time it has not been worth cultivating. As I had a hundred or more trees of that kind of apple, I tried many experiments on them, but could do nothing to make the fruit grow fair as it formerly did.

In 1805, I began to take care of the orchard which my father had previously cultivated, and from that time to 1847, I have had the care of an orchard of from seven hundred to a thousand trees, and have tarred seven hundred trees for a fortnight to keep the canker worms down. As I had a great number of old trees that did not produce good fruit, I began forty years since to graft over large trees that would take from thirty to one hundred scions, and sometimes more to each tree. I think I may say I have never failed to be well paid for my labor.

I made an experiment some twenty years since on an old apple tree; the trunk was rotten and hollow, and our girls used to go and get the rotton earth from it to put in their flower pots. I pruned and grafted it, and it has borne well to the present time, although so far decayed as no one would think it could be made to bear good fruit.

The all important question is, to *know how to do it*, how to manage these old trees, with some dry limbs and full of sprouts, and perhaps on land that never was cultivated at any time. With your leave I will at some future time give you my method of pruning, grafting, &c., as I have not the time now to devote to it, which is necessary.

Yours respectfully, D. L.

Sherburne, March 19, 1852.

N. B. Since the above was written, I have read Mr. Morrison's remarks, upon the same subject, which I consider generally correct. But in one respect I differ from him, which, should I say anything further, I should take the liberty to state.

Remarks.—We are strongly in favor of pruning and scraping all the old apple trees, then of grafting and cultivating them. Why, we would not cut one of them down sooner than we would any other old friend, so long as life was evident in its familiar old trunk and limbs. Look at the old representative of other years! Your daughters gathered the fine, rich mould from its decaying trunk long before they were married, to support the plants which decorated your parlor windows; and now *their children* are regaling themselves upon fruit which drops from its new and vigorous branches, and you enjoy their gambols while reclining in its shade. So long as there is a vigorous shell of an inch thickness, do not give up an old tree. We hope to hear from our correspondent again.

For the New England Farmer.

IS IT SO?

Mr. Brown:—I wish to call your attention to an assertion in the Jan. No. of the *N. E. Farmer*, which I think is an error. You say on page 10th, "men and horses, only, sweat, so say the medical men," &c.

Now, sir, I am aware that "medical men" understand more about physiology than farmers generally, but still they are not infallible.

I have always believed that oxen and cows sweat; and the reason why I have believed so was, I have very often in hot weather seen them entirely covered with moisture; sometimes to that degree that the coat appeared completely saturated. This could not, I think, be condensed vapor, for the body of the animal at the time would be quite too warm for that; so, that unless it can be proved to the contrary, I shall affirm that oxen sweat as well as "men and horses." L. B. P.

Worcester, Vt., 1852.

Remarks.—Dr. Vandenberg must settle this matter with our correspondent.

SPRING WHEAT.

This grain is already very important to large farming districts in Pennsylvania, and may most profitably be cultivated in many parts of the State where winter wheat in a great measure fails. The objections urged against it generally, are three. 1. That it is inferior in quality. 2. That it is liable to smut; and 3. That it is an uncertain crop, owing to its being so frequently blighted and shrunk by mildew. But from an experience and examinations of seven years I am convinced that these objections are not well grounded. As in all crops, the quality depends much upon cultivation. With good cultivation the Italian wheat weighs sixty to sixty-two pounds and yields forty to forty-three pounds of superfine flour to the bushel. The flour, although not quite as white, makes as good bread as any winter wheat. It has usually a slight yellowish tinge. If wheat were not *too much* judged of by the whiteness of its flour, I doubt not that good Italian wheat would soon rank as high in the market as Mediterranean winter wheat.

The second objection is entirely obviated by a proper preparation of the seed. I have had no smut for twenty years except where I have sown wheat without washing and liming. My process is to wash my wheat thoroughly in strong lime, which raises to the surface all oats and other light seeds, which are skimmed off. While wet it is thrown upon the barn floor and finely pulverized, quick lime in small quantities is sifted over it. The whole is so mixed that every kernel is coated with lime. It may safely be left in this way for several days before sowing. If sown immediately, the lime is unpleasant to the hand, and to prevent its injuring the sower a small quantity of gypsum is scattered over it. No smut is ever found in spring wheat prepared in this manner. The salt, lime and gypsum are all admirable manures.

The third objection is obviated by early sowing. In large districts in the northern part of the State it is difficult to plow early. The soil is a heavy clay and loam and retains the water very long. It is absolute ruin to the crop to plow while wet, and consequently the farmer who relies upon spring plowing for his wheat will be unable to sow before the last of April or the first of May—a month too late here. The plowing must be done in the fall and the sowing at the earliest practicable day after the frost is out of the ground. The best spring wheat in quantity and quality, which I have ever known raised, was upon a green sward, which had been turned under late in November and upon which the wheat was sown without further plowing, the latter days of March. A very light drag-

ging lengthwise of the furrow before sowing, and the wheat was lightly dragged in so as not to raise the sod. Sown in this way it will be fit to harvest the latter part of July. Wheat which ripens in July is seldom affected by mildew. Two bushels of seed should be sown per acre.

I have tried the Baltic wheat, which is said to be successfully cultivated in Vermont, but it is greatly inferior in quality as well as quantity to the Italian.—*Granite Farmer.*

For the New England Farmer.

HOGS.

It is an old adage that "a sick pig is sure to die," but there are exceptions to all general rules, as the sequel will prove. I had a fine lot of pigs about three months old, which had been confined in a pen where they had no access to the earth since they were a week old, all of which appeared in good health until a few days since, when one morning on feeding them, one, while eating, fell down apparently in a fit; his breathing was scarcely perceptible. After a few minutes he began to recover and to breathe not unlike a horse severely afflicted with the heaves, but soon appeared entirely recovered and ate as usual. The next day he had another attack, but much more severe than the first; these continued daily for four days, when he died. Having in my possession several volumes of the *Albany Cultivator*, I examined them, but did not notice any thing that applied to this case. Soon two others were attacked in the same manner, when I bled them by cutting a slit in the ear, and cutting off a piece of the tail. On examining their bed it was found very wet and uncomfortable. Dry straw was substituted, and the pen opened so that they could pass out and in as they pleased. It was observed that they spent a great part of the time, after being permitted to go at large, at a pile of old wood which had been recently cut and lay near the pen; this excited sufficient curiosity to notice more particularly the reason of this choice of location, which was found to be the great quantities of decayed or rotten wood which lay scattered about the pile, and which they ate immoderate quantities. Perhaps it should be mentioned, that they were not fed for several days after being let out of the pen. The pigs, however, have entirely recovered.

Having but recently engaged in farming, I took the liberty to inquire of some of our best farmers in regard to the disease, and they pronounced it what is commonly known in this section of the country as the *Thumps*. One of my friends informed me he had lost several last spring, and had cured several. His method is as follows:—As soon as the pig is attacked, take a sharp knife and make a severe cut entirely to the bone directly between the eyes, about three or four inches in length, and put in a mixture, in equal quantities, of black pepper and salt, and give the animal three or four days in succession one-sixth part of a teaspoonful of antimony mixed in a soft mash of bran and water; as the antimony is liable to settle at the bottom, it is well to stir it at short intervals while the pig is eating, that it may be well mixed with the food. I have nothing to say as to cause or effect, but give the simple facts, and let every reader draw his own inferences. P. S. B.

Salisbury, Feb. 13, 1852.

Remarks.—As the sick pigs of our correspondent recovered by being permitted to come to the ground, he will probably never split their heads open as a remedy. We hope none of his neighbors ever will These rash experiments are cruel and dangerous When the pig rushes furiously about the pen and strikes his head and nose against its sides, it is quite evident that the brain is affected; but it would seem about as rational to us, to apply a blister to the end of a cow's tail for a dislocated hip, as to "cut a slit in a hog's head entirely to the bone, about three or four inches long, directly between the eyes, and fill it with black pepper and salt." A milder and better course would be, when the paroxysm has subsided, to let the poor beast loose and drive or lead him gently to running water, a brook or pond, and his own instinct will teach him how to allay the inflammation which is raging in his system. A stout hog is an uncomfortable patient, and nostrums, of any kind, are of little service. An ounce of prevention is worth a good deal more than a pound of cure with the hog. Swine are rarely sick, if properly managed. They require regular feeding, both as to time and quantity, *salt* in their food two or three times a week, and what is absolutely indispensable to profit, *a dry and warm place to lie in.* They should have grass, or other green and succulent food, in the summer, and access to the fresh earth always. If your pig has not already contracted disease, he will remain healthy, and afford a profit under such treatment as we have described above.

TRANSPLANTING, BUDDING AND GRAFTING.

In the agricultural department of the Patent Office Report for 1850—51, is a large amount of practical agricultural information. Gershom Wilborn, of Essex County, Mass., communicates the following upon Transplanting, Budding and Grafting:—

Transplanting.—Land to be set with fruit trees should be plowed in the fall, or very early in the spring; it should be plowed very deep or subsoiled. When the ground is quite ready, get your trees, and set them the same day if you can; never buy trees that have been dug over winter, and "lain by the heel," nor plant so late in the season as when the leaves have started: trees of this kind may live, but you lose the growth of them the first season, whereas, by the right kind of management, transplanting will hardly put them back at all. I have often planted trees which grew four feet the first year. Holes should be dug of sufficient width and depth to extend the roots to their original capacity. When the trees are placed in the holes, spread out the lower roots and cover them with fine earth, as also all the rest in like manner; get the roots into the earth so that they will stand interspersed, in regular system, with the soil, as the roots of a growing tree always do. The practice of thrusting the roots of a tree all in a heap, then piling on hard earth, manure, &c., and stamping it down hard, is sometimes successful, but no sci-

entific cultivator would recommend it. After trees are set, the ground should be stirred around them while the heat of the season lasts, as often as once in two or three weeks; and if great drought should prevail, they should be occasionally watered; this should be done by making holes with a stick among the roots, and then pour on a pail of water.

Budding.—Apple trees, and all others except plums and cherries, should be budded in the latter part of July or the first of August; they should be put in so late that they will not grow the same season. The plan of operation is to select a shoot of the present season, with good buds, and cut off each leaf within half an inch of the leaf-stalk; then hold the shoot in the left hand, and the knife in the right; the lower part of the blade is placed on the shoot about half an inch above the bud—the thumb of the right hand rests on the shoot at the lower extremity of the bark to be removed with the bud; the knife is then drawn towards you, parallel with the shoot, smooth and level, so that the bark and a portion of the wood will be taken off. The stock to be budded should be of the present year's growth—a T should be made in the bark with the knife, and the bark raised with some convenient instrument; the bud is then inserted, and the bark is brought back and tied over the bud, letting the leaf-stalk project out of the stem in the bark.

Grafting.—Grafting is performed in the spring. The last of March is the proper time for plums and cherries; and April for all others. In grafting, thrifty young stocks should be preferred. The operation is simple, and consists in cutting off the stock at the point where we wish to insert the scion, and splitting the stock down the centre; the scion is cut at its lower end, in the form of a wedge, and inserted in a split in the stalk; the outside bark of the scion should fit nicely the bark on the stalk. A salve made of 1 pound beeswax, 6 of rosin, melted with 1 pint linseed-oil, is then used to cover the seams made in the operation, so as to render the whole air-tight: the salve should be looked to occasionally, and kept smooth and tight on the seams, for it sometimes gets open and lets in the air, which will destroy the scion. Scions should be of the last year's growth, and have upon each two or three buds.

Remarks.—The above article is as concise and practical as can be desired by any one who wishes to bud, graft or transplant. We should think the proportion of rosin given too large; but a little experience will enable you to temper your grafting wax to suit. The ingredients are of the right kind.

Sowing Seed.—Farmers, as well as other people, like to make good bargains, and we like to have them, especially when they buy a year's paper of us, and pay for it in advance. But that is not the bargain we are going to write about. It is the sowing of grass seed. If you would make a good bargain with mother earth, give her a plenty of seed. If you scrimp her, you cheat yourself and cheat your earth, and are guilty of double dishonesty. If you undertake to save five dollars in seed, you will lose twenty dollars in hay and pasture. Be wise, then, and sow bountifully, and you shall gather bountifully, and make a good bargain.—*Vermont State Journal.*

THE FARMER'S CREED.

We believe in small farms and thorough cultivation. The soil loves to eat, as well as its owners, and ought therefore to be nurtured.

We believe in large crops, which leave the land better than they found it—making both the farm and farmer rich at once.

We believe in going to the bottom of things, and therefore in deep plowing, and enough of it—all the better if with a subsoil plow.

We believe that the best fertility of any soil is the spirit of industry, enterprise, and intelligence—without this, lime and gypsum, bones and green manure, marl or plaister, will be of little use.

We believe in a clean kitchen, a neat wife in it, a spinning-piano, a clean cup-board, dairy, and conscience.

We firmly disbelieve in farmers that will not improve; in farms that grow poor every year; in starved cattle; in farmers' boys turning into clerks and merchants; in farmers' daughters unwilling to work; and in all farmers who are ashamed of their vocation.

HINTS ON FRUIT ROOMS.

BY M. P. WILDER, BOSTON.

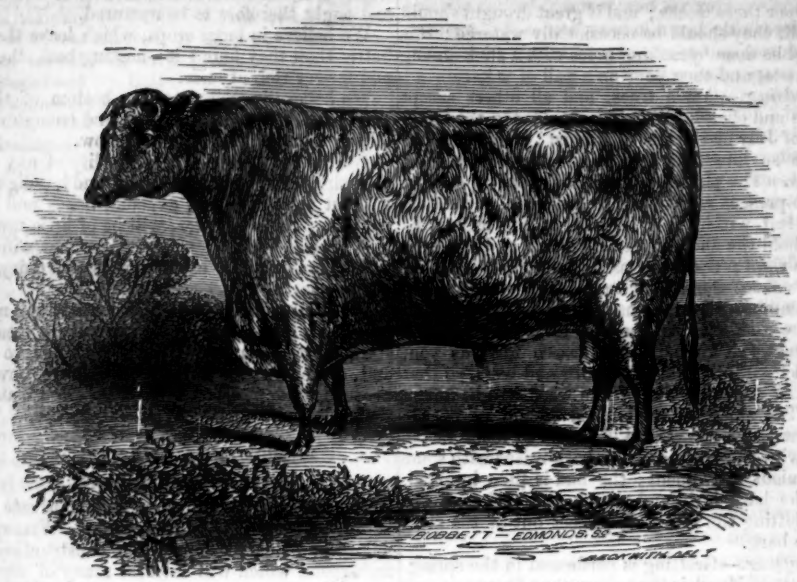
We extract by permission, from a private letter of January last, from Hon. M. P. Wilder, the following notes regarding the construction of a fruit-room, which will interest many of our fruit growers.—Ed.

My fruits are keeping admirably in the new fruit-room. This room happens to have been situated and constructed so much like Mr. Morrison's, (of which you have seen the drawings and description in the Gardener's Chronicle,) as to be almost a fac-simile of his.

The walls of mine, however, are filled in with charcoal and sawdust.

The Beurre Diel, Vicar of Winkfield, Excellentissima, and other autumn pears, are now in as perfect condition as when gathered from the trees, and so they will remain till the warm weather of spring approaches. I shall then try some of them in the non-conducting boxes, where I think they may be kept till summer. I have, by a similar process, preserved some varieties till July. Mr. Morrison has no new principle. All that is necessary, is to obtain a low temperature during the warm weather of autumn, and to preserve this equilibrium. This being attained, there is no difficulty whatever. When the severe weather of last month occurred, my fruits were removed from the shelves and packed in boxes, with a thin layer of clean rye straw between each tier, the tubes of the straw containing air enough to correct mildew and damp. The boxes are now piled on one side of the room, and covered with hay about three feet in depth.

My experiment was suggested by the bad effects of moisture and warmth in my old fruit cellars, under my dwelling-house, and the same difficulty exists with rooms on the ground-floor of buildings. I therefore resorted to the other extreme—a cool and dry chamber on the north end of my barn, the location of which you know, (and like Mr. Morrison's,) over the carriage room. I am now quite satisfied that we have at last ascertained the proper location for a fruit-room; namely, a cool upper apartment, with lined non-conducting walls.—*Horticulturist.*



SHORT HORN, OR DURHAM BULL.

Under the term *Short Horned cattle* are included the *Holderness* and *Teeswater breeds*, which were supposed to have derived their origin from a cross with some large bulls that were imported, nearly a century ago, from Holland into Yorkshire, in England. The cattle are of good size, and are beautifully mottled with red spots upon a white ground; their backs are level; the throat clean; the neck fine, but not too thin, especially towards the shoulder; the carcass full and round; the quarters long; and the hips and rump even and wide. That this breed is excellent for the shambles, is generally conceded. We would not say that they are the best milkers, though we have known some that it would be difficult to beat, and some excellent dairymen give them the preference. But recently the Devons and Ayrshires seem to have more of the public favor as milkers.

Our engraving represents a Durham Bull, "Earl Seaham," the property of Messrs. Sherwood & Stevens, which received a prize at the State Fair in New York last autumn, and is a well-proportioned, fine looking animal.

For the New England Farmer.

COWS GIVING BLOODY MILK.

I have had cows give bloody milk, and have invariably effected a cure by giving a table spoonful of saltpetre two or three days in succession.

JERE. FULLERTON.

Raymond, N. H., March, 1852.

For the New England Farmer.

CAUSE AND CURE OF POTATO ROT.

MR. EDITOR:—As it is drawing near the time of putting the seed into the earth, I would call the attention of your numerous readers, to an article dated Sept. 15, 1851, headed, "Cause and Cure of the Potato Rot," inserted in your columns first of November, 1851. As some have pretended to be the first discoverer of the same remedy, something like two months after the publishing of my article, it puts me in mind of a man who went to a neighboring town, and saw a peat fork, and on his return home caused one to be made and claimed to be the inventor. Yours, &c.

I. N. MERRILL.

SIX TONS TO THE ACRE.—Take a first rate piece of land, *Mr. New York Farmer*, plow it sixteen inches deep, spread on twenty-five loads of good and well-composted manure; plow that in, three to six inches deep, level and sow twelve quarts of herd's grass, one bushel of red top and six pounds of clover seed to the acre, and with heaven's blessing upon it, if you don't get six tons to the acre in two cuttings, why then you wont get as much as we believe Mr. CLAPP, of Greenfield, did, to whose statement you refer, and which we heard and reported in these columns. It's a large crop, sir, but it is often produced in this "cold and barren New England." There is nothing like KNOWING HOW.

☞ The Vermont State Agricultural Society will hold their Annual Exhibition at Rutland, on the 1st, 2d and 3d days of September next.

For the New England Farmer.

SELECTION OF FRUITS.

BY GEORGE JAQUES.

I noticed in the last number of the weekly *Farmer* a half-dozen quince-rooted and a half-dozen pear rooted pears recommended for general cultivation. Considering that this recommendation was based upon "the authority of two or three of the most distinguished horticulturists of New England," I was surprised to find the *Passe Colmar* inserted in the first list, and the *Bartlett* omitted in the second. For myself, I should hardly venture to recommend the Passe Colmar in a list of less than twelve or fifteen varieties on quince; and as for the Bartlett, I should not venture to omit it in the smallest number of standard (or pear-rooted) trees. However, I will not find fault without attempting to furnish a substitute, and so I submit to your and your readers' criticism my two lists of six pears for each mode of cultivation.

PEARS ON QUINCE.

NAME.	TIME OF RIPENING.
1. Beurre d'Amalis	September.
2. Louise Bonne de Jersey	Sept. and Oct.
3. Urbaniste	Oct. to Nov.
4. Duchesse d'Angouleme	November.
5. Beurre Diel	Nov. and Dec.
6. Glout Morceau	Dec. and Jan.

Were I to increase the number to nine, I would add Golden Beurre of Bilboa, (Sept.;) St. Michael, (Oct.;) Vicar of Winkfield, (Nov. and Dec.,) &c.

PEARS ON PEAR-ROOTS.

NAME.	TIME OF RIPENING.
1. Rosteizer	Aug. and Sept.
2. Bartlett	September (early.)
3. Flemish Beauty	September (late.)
4. Seckel	October.
5. Dix	Oct. and Nov.
6. Beurre d'Aremberg	Dec. and Jan.

Extending the list, I would add,—

7. Madeleine	August.
8. Andrews	September.
9. Belle Lucrative	September.
10. Louise Bonne de Jersey	Sept. and Oct.
11. Urbaniste	Oct. and Nov.
12. Winter Nelis	Dec. and Jan.

Adding still farther such as promise remarkably well, I would name,—

13. Paradise d'Automne	Sept. and Oct.
14. Swan's Orange, or Onondaga	Oct. and Nov.
15. Beurre Langlier	Dec. and Jan.

There are a great number of other pears of much excellence; but, as the Frenchman affirmed, "too many is no better than enough," and therefore I will not at present extend the list.

Of the pears above recommended, the trees grow vigorously, and are hardy and productive. The fruits are of the finest dessert varieties, and ripen successively, so as to afford an almost constant supply through the year. From my own experience, however, I find it much easier to recommend what are excellent than what are *the most* excellent of pears or other fruits.

Now I am writing, I will remark, that being restricted so as to be permitted to have but six apple trees, each of a different dessert variety,—growth, productiveness, home and market value of fruit, &c., all taken into account, I would choose, as at present advised,—

NAME.	TIME OF RIPENING.
1. Porter	Sept. and Oct.
2. Gravenstein	October.
3. Hubbardston Nonsuch	Nov. to Feb.
4. R. I. Greening	Nov. to March.
5. Baldwin	Dec. to March.
6. Roxbury Russet	March to June.

The best four sweetings, perhaps, are,—

1. Large Early Bough	August.
2. Jersey Sweeting	Sept. and Oct.
3. Danvers Winter	Nov. to April.
4. Ladies' Sweeting	Jan. to May.

Nos. 2 and 4, however, have as yet been hardly sufficiently tested in our climate. The number of first-rate varieties of sweetings still continues to be quite small.

The best three cherries are those recommended by Col. WILDER:—May Duke, (early;) Black Tartarean, (a little later;) Downer's Late, (a little later still.)

The best half-dozen *plums* are none at all, at least in this vicinity.

The best advice, in all fruit matters, is one's own observation and experience.

Truly yours, G. J.

Worcester, April 12, 1852.

REMARKS.—"Who shall decide when doctors disagree?" Of ourselves, we have no great confidence in selecting choice fruits, and are always glad to defer to others whose experience has been very extensive, and whose skill can scarcely be doubted. But fruits vary materially on different soils and in different locations; so that good judges, even, come to different opinions in regard to the same fruit. At a late agricultural meeting at the State House when the subject of discussion was *fruits and fruit trees*, Col. WILDER and Mr. FRENCH, both recommended the Rhode Island Greening, and now our esteemed correspondent includes it in his list. Now if we were about to recommend a list of choice apples, this fruit would not find a place in it, for the reason that with ourself, and in our vicinity, it is almost worthless; running to a dense and beautiful foliage, and when bearing dropping its fruit prematurely. But in other locations it is an excellent and profitable variety. We thank our correspondent for this timely contribution to our columns, and improve the earliest moment to give his opinions publicity.

PRESERVING HAMS.—While writing, and as it is the season of the year for securing smoked ham, or other meat, from the flies and bugs during the summer, I will give my plan for the same. After having the hams properly smoked I pack them down in coarse rock salt in a box, or cask of suitable size, covering everything well with the salt; they keep clean, cool and dry, and most perfectly secure from insects of every kind. The same salt is not injured and answers for pork in the fall, so that no loss is sustained. I have tried many experiments heretofore in keeping hams; but my present method is decidedly the best and the least trouble. Respectfully yours, &c.,

A. Y. MOORE.

—*Michigan Farmer.*

THE SPINDLE CITY and MIDDLESEX FARMER, published at Lowell, Mass., has an Agricultural Department conducted by Mr. L. H. HILDRETH. It has well-written editorials and will help the good cause in Old Middlesex.

REPLIES TO CORRESPONDENTS.

W. B. W., *Gilford.*—In answer to your inquiries whether "there is a patent on our Poultry Feeder," we reply that there is not. It was designed and made to meet our own wants, and more than answers every expectation we had indulged in. Though made with our own hands, we cannot explain to you on paper how it was done.

The feeder is two feet square on the bottom, two feet high, and the large part of the upper hopper sixteen inches square. In the engraving one of the doors is open, because the weight of the fowl has opened it in stepping upon the lattice. When she steps off, the door will fall by its own weight and have the same appearance as the one on the left hand of the engraving. The two outside rails of the lattice work come square to the end of the bottom, and are fastened there by wire snipe-bill hinges; the centre rail runs into the hopper far enough to go nearly to the back side of the door. On the top of the rail, near the end, a wooden peg is inserted, with a small wheel in the end of the peg, as will be seen in the engraving. When the fowl steps upon the rack and presses it down, the wheel strikes the door and raises it—when she steps off the door falls, and the grain is secure.

J. V., *Woodstock, N. H.*—To find the information you desire, we would refer you to a report on Fruits by Col. WILDER, made to the Legislative Agricultural Society, which may be found in this number.

SUBSCRIBER, *Sanbornton, N. H.*, shall soon have as full a reply as we can find time to make.

W. M. P., *Montague.*—Thanks for your good opinion of us. We shall be active at our post—heart and hand are there, you may rely upon it. With such words as yours, and substantial tokens as your letter contained, we shall urge our way onward rejoicing.

Cut the bark of your trees smooth and square above and below where the mice have girdled them, then take two or three pieces of bark from a healthy tree and press it in closely in a perpendicular position; wind any old cotton cloth about the wound and bank the earth over it. Your tree will live, grow, and thank you for your pains.

M. H., *Barnstable.*—Leached ashes are excellent for almost any land. In the process of leaching they lose most of their *potash*, but retain other valuable fertilizing properties. They are said to be of particular service to the oat crop, and on clay soils. Fifty, sixty, or a hundred bushels of leached ashes, with half a dozen bushels of plaster, and a few pounds of bone dust, make a most excellent manure for corn, mowing or pasture land. Leached ashes vary in price, according to location and demand, from three to twelve cents per bushel.

B. F. S. G., *West Newbury.*—The yellow apple sent we should call the Yellow Belle-Fleur. The sample appears imperfect, and does not answer the description of the Belle-Fleur in all particulars. The green apple is the *Green Winter Pippin.* The red (russetted) is the English Russet, and in our estimation is one of the two best apples produced in New England. It is a good bearer, producing every year, is crisp, tender and juicy, thin skinned, highly flavored, and will keep two years, if you desire it. Wherever it becomes known it is appreciated. We are preparing its history in this country, and by-and-by shall be able to tell you all about it.

A SUBSCRIBER, *Holderness, N. H.*—See remarks to "W. M. P.," above, in relation to girdled trees. Clean away all dry weeds, grass, leaves, or litter of any kind, from about the trees in the autumn, and the mice will rarely molest them. A good plan is to bank up the tree with loam, and spread it in the spring.

H. F. H., *Lawrence.*—The apples you sent are probably seedlings. Several good judges have examined them, but did not recognize any known variety among us.

G. B. W., *Middletown, R. I.*—Capital—go on with your society. The subjects introduced are important, and no doubt were ably discussed. G. B W. thinks advertisers would sell their farms more readily if they would always affix a price.

S. T., *N. Raymond, Me.*—"Give me my paper and nought but cold water to drink, rather than all the tea and coffee in christendom and no paper." That's the true spirit. Let us hear from you, as you propose.

A communication from "W. F. B.," Ashfield, one from "A. K.," Lunenburg, one from "F. B.," Fort Wood, N. Y., one from "J. L. L.," Hartford, and one from "I. I.," East Shelby, N. Y., are deferred to be published in their appropriate season. They would lose much of their force by being published now.

Bethel, Vt.—The apples sent us by a gentleman of Bethel, are undoubtedly very fine specimens of the Northern Spy.

B. F. S. G.—Please send us a sample of the Yellow Bellflower and of the Lemon Pippin, if you have them.

A. S., *Newton, N. H.*—You would scarcely get satisfactory replies to your question from our correspondents. We have had a larger supply of eggs from a cross of the native and Cochin China than from any other breed; a friend near says he gets the most from the Chittagongs—another from the Poland, and so on. It is our opinion that it does not depend so much upon the kind of fowl as upon the place they inhabit and the kind of keeping. After a plentiful supply of food, *warmth* is absolutely necessary.

R. H. H., *Burlington, Vt.*—Communications re-

ceived; will appear in good time. Your girdled trees may be saved by inserting fresh strips of bark from other trees, and excluding the air from the wounded parts.

N. C. T., *Washington, D. C.*—Thanks for your excellent article—will find a place for it soon.

E. M.—The "Rural Sketch" is evidently the work of a young hand. It contains many good ideas, and indicates a close observation of irrational life, but needs pruning both as regards correctness and length. Plain prose is far better than rhyme. We can find nothing in that way better than the Georgics.

For the New England Farmer.

GRAFTING WAX.

BY HONESTUS STEARNS.

Mr. Editor:—I have lately read several articles recommending grafting wax prepared with *linseed oil*, &c. I have used this wax for the last two years, and that gives me some right to judge of its merits; and for the benefit of your readers and the community at large, I will venture to give a little of my experience and opinion concerning it. In the first place, in the preparation of this wax, it is evident no chemical combination takes place between the ingredients; therefore there is nothing to prevent a portion of the oil being absorbed by the bark both of the scion and stalk, which immediately puts a stop to all circulation of the juices wherever the wax comes in contact. This recei was highly recommended by a friend, and it struck my fancy as being just the thing. I used it, and in consequence, I have lost more than a thousand scions, of choice varieties of fruit, some of them obtained at a distance at a heavy expense, besides ruining many valuable seedlings by the failure. The first year, I attributed the loss to some other cause; but after the failure the second year, I was convinced of the true cause; and on examination, I found, as a general thing, the bark of both stalk and scion completely dead. A very few set late in the season, after the circulation of the juices had become sufficient to counteract the pernicious influence of the oil, barely lived; but their stinted growth told a sad story.

The following recipe forms a perfect article; and one that is in no way injurious—though the body of a tree were completely covered with it. It is the same used by Geo. R. Gill & Son, experienced and skilful nurserymen of Springfield, Vermont, and I think the same recommended by the late Mr. Cole, in his work on fruit, viz.:

4 *parts good Rosin,*
2 *parts Beeswax,*
1 *part good Beef Tallow.*

Cloth may be used with the above wax, but I do not recommend it. In splicing or tongue grafting, all that is necessary is to stretch out the wax into a strip and wind it round. A little lard rubbed on will prevent its sticking to the hands. The following is recommended as a wash to cover wounds caused by pruning:

Saturate alcohol with gum shellac, and apply with a painter's brush.

Yours truly, H. S.

Felchville, March 8th, 1852.

Remarks.—Linseed oil is recommended by many of our experienced farmers and nurserymen, as better than tallow in making grafting wax. We have used it without injury. This difference of opinion should teach the importance of close and continued observation in this as all other matters of the farm.

Ladies' Department.

SELECTION OF A CARPET.

The walls being properly papered, the next thing is to consider the pattern of the carpet. In this also the rule must be followed, of selecting small patterns for small rooms. There is economy in this, as well as taste, because small patterned carpets are generally found the most durable. As a rule, a formal geometrical pattern is best for a carpet; it should be something which does not appear unnatural to tread upon. It is a mistake to put flowers, trees, or figures of birds or animals, into a carpet, for we do not walk on such things; far other are their purposes and uses. Sometimes a carpet is made to represent a picture or landscape, which is also a mistake, for it offends our notions of propriety to see such objects spread on a floor. In the formal pattern, all these defects are avoided; it is not unusual to walk upon ornamental pavements or floors, and we are not displeased at seeing varieties of similar ornaments reproduced in a carpet. Those persons who have seen the House of Lords will remember that the pattern of the carpet is nothing more than a small amber-colored star, on a deep blue ground, which, simple as it appears, harmonizes admirably with the superb decorations of the spacious edifice.

Another reason why a small pattern should be chosen is, that it suits best with the furniture of a room. The furniture must of course cover some portions of the carpet, so that if the pattern be large, there is so much confusion between what is seen and what is hidden, that a very disagreeable effect is produced. With a small pattern, on the contrary, the concealing of a portion by the furniture does not spoil the effect of that which remains uncovered. In general suitability the Turkey carpet is the best; it is adapted for almost any style of furniture, and no one ever gets tired of it, owing to the perfect naturalness and harmony of the pattern. Let it be remembered, that neither on the wall nor on the floor should there be any one strong predominating color which injures the effect of everything else in the room. As a rule, the color of the carpet should be darker than that of the walls; very light patterns are most suitable for bedrooms.

WOMAN'S RIGHTS.

David Hale, late editor of the *Journal of Commerce*, once wrote a *jeu d'esprit* on the "Rights of Women," in which he showed that the balance of wrongs was decidedly on the side of the men. "When the simple question of superiority is at issue, the men always have to give up. If ladies and gentlemen meet on the sidewalk, who has to turn out? If there are not seats enough for all the company, who has to stand up? When there is danger to face, who must go forward? If there is curiosity to gratify, who goes behind? If there

is too much company for the first table, who eats at the second? Who has always the right hand and the most respectable position?" We could mention a hundred other cases in which, on the simple question of right, everything is yielded to the women.

But there are many cases in which the condition of men is still worse. For instance, if on any public occasion a pew at a church, or a seat anywhere, be occupied by men ever so respectable or aged, a smirky little beauty trips along and presents herself at the top of the seat, and they must all jump up and clear out as if they had been shot. Especially ought it to be noticed, that when matrimonial negotiations are to be made, the whole burden of performing the delicate and often very embarrassing part of making proposals is thrown upon the men, while the women sit and say no, no, no, as long as they like, and never say yes, until they have a mind to.

DOMESTIC RECEIPTS.

Indian Baked Pudding.—One pint of Indian meal, one heaping table spoonful of wheat flour, a table spoonful of butter, four eggs, salt just to taste, milk enough to form a batter. Stand your butter near the fire to warm, add it to the Indian meal, then the salt and milk. Beat the eggs very light, the yolks and white separate; add the yolks to the Indian batter, then the whites alternately with the flour. Do not beat it after the whites are in. Butter a pan, pour in the batter, and bake it in a moderate oven. This pudding is very good with a quarter of a pound of currants and a quarter of a pound of raisins, floured and stirred into the batter. To be served with sweet sauce of any kind.

Oxford Pudding.—Half a pint of bread crumbs, one pint of milk, six eggs, two ounces of butter, half a pint of cream, a quarter of a pound of dried currants, sugar and nutmeg to the taste. After the bread is soaked in the milk, which should be warm, mash it very smooth and add the butter while it is hot. Beat the eggs very light, the yolks first, and stir them into the bread and milk, then add the cream, sugar, nutmeg and fruit. Lastly have the whites whisked to a dry froth; stir them gently into the mixture; butter your cups, half fill them with the batter, and bake them in a tolerably hot oven. Serve with pudding sauce.—*National Cook Book.*

Yeast.—The bitterness of yeast, which is often a cause of complaint, may be removed by straining it through bran, or by dipping red hot charcoal in it. But the most effectual and easily available remedy is to put the yeast into a large pan, and cover it with spring or well water, changing it every three or four hours. The bran seems to impair the strength, and the coal sometimes stains it, but the water purifies it in color and taste.

The mode of using water for keeping and purifying yeast has been adopted by some of the American housekeepers with entire success. So says the *Gardener's Chronicle.*

Hannah More's Pudding.—Six ounces of apples, chopped fine; six ounces of beef suet, chopped fine; six ounces of bread, grated; six ounces of currants; six ounces of raisins, stoned and chopped; six ounces of sugar; six eggs, well beaten; three ounces of candied peel, chopped; half a nutmeg, grated; and a glass of brandy. These ingredients to be well mixed, and boiled in a well buttered quart mould for three hours. This pudding should be mixed the day before it is cooked. It is a rich pudding for company, and not expensive.

Boy's Department.

THE BAG OF DAYS.

Suppose you had a bag of marbles on your shoulder to carry, and yet if every boy you met, made you give him a marble, your bag would soon be empty.

We are all sent into this world by God, with a bag, not of marbles but of days. Sometimes death stops the little child before it has gone far with its bag of days, and its life in this world is closed. But perhaps you may live for many years; yet do not forget that Time is always after you, taking now a day and again a day, and he will soon empty the largest bag of days.

If the bag were one of marbles instead of days, people would feel the bag lighter, and inquire who had taken them; but many do not think that their bag of days is always getting lighter, and too many find it nearly empty before they scarcely think about it.

O, we should never forget that every night we lay down to sleep, Time has taken another day out of our bag. We have no time to lose, we cannot afford to trifle, and therefore while life is before us, we must learn to improve what is good and useful, to be pure and holy, so that if we live to be old, we may look on the days that are left in our bag without a sigh, nor regret the days lost or idly spent.

That is a good prayer in the Bible, "Lord, teach us so to number our days, that we may apply our hearts unto wisdom." Let us often think of our bag of days, and examine it, to reckon up how many time has taken away, and how many are left. Let us use every one for the best purpose, and pray this good prayer to our Father that we may not slight or abuse them.

Politeness at Home.—Always speak with the utmost politeness and deference to your parents and friends. Some children are polite and civil everywhere else but at home, but there they are coarse and rude enough. Shameful!

Nothing sits so gracefully upon children, and nothing makes them so lovely, as habitual respect and dutiful deportment towards their parents and superiors. It makes the plainest face beautiful, and gives to every common action a nameless but peculiar charm.

"My son, hear the instruction of thy father and forsake not the law of thy mother, for they shall be an ornament of grace unto thy head, and chains about thy neck."

Appointment and Disappointment.—Gen. Taylor, on one occasion, being besieged by office-seekers, made the smart remark, that "some were doomed to appointment, and some to disappointment."

Mechanics' Department, Arts, &c.

TO CUT AND GRIND GLASS.

The art of cutting glass is much more modern than that of painting and staining it. At present the richness and brilliancy of our vessels of glass, which contribute so much to the ornament of our tables and saloons, are owing, in a great degree, to the elaborate manner in which they are cut. The cutting is effected by wheels driven by considerable power, the glass being held to the wheels. The first cutting is with wheels of stone, then with iron wheels covered with sharp sand or emery; it is then polished in the same manner by putty, or oxide of tin. To prevent too much heat being excited by the friction, a small stream of water is constantly running on the glass. In large manufactories the wheels are urged by a steam engine. Glass may be ground by hand on any coarse-grained sand-stone, or with sand, or with emery and water. Panes, or flat pieces of glass, may be divided, when a glazier's diamond is not at hand, by making a notch with a file and carrying a piece of hot charcoal in the line in which it is wished the fracture should proceed. The charcoal must be kept alive with the breath. A red hot iron will also do. The art of casting in glass has lately arrived at such perfection that many articles, such as small plates, salt-cellars, &c., now almost rival, at first sight, those that are cut; and glass casting has one advantage over glass cutting, that certain ornaments can be cast that could not be cut with the wheel; but no casting has yet quite equalled the sharpness and beauty of cut glass, and indeed cannot bear close comparison with it.—*Encyclopædia of Domestic Economy.*

MODE OF PRESERVING SHINGLES ON ROOFS.

A gentleman in Groton gave us the other day the manner in which he prepared his shingles, before laying them on his house, some six years ago; and on examination, we found they had a perfectly sound and fresh appearance, as though they had been laid not more than a month.

He had a large boiler, which he filled with whitewash, mixing with it, about one pound of potash to four gallons of liquid, also about the same amount of salt. This composition he boiled, and while it was boiling, he dipped the shingles in, taking a handful at a time, and holding them by the tips. He had boards placed so that he could set his shingles on them on end, and let the liquid, as it ran off them, run back again into the boiler. The shingles he allowed to dry in this position, before laying them, and his belief was, that by thus curing or hardening them, they would last much longer. They could be colored red or yellow, easily, by mixing red or yellow ochre with the composition.

The expense for shingles on a roof, is very considerable, as the most of those which we buy now, unless we go to a very high price, in purchasing, last but for a few years, and therefore something that will harden and preserve them like the above, and which costs but little in the application, will be thankfully received by owners of buildings.—*Spindle City.*

Farm for Sale in Concord, Mass.,

Situated half a mile from the village, on the road to Lowell, containing about seventy-five acres of good land, well divided into Mowing, Tillage, Pasturing and Woodland, and having thereon an excellent Orchard and Cranberry Meadow. Said farm is well enclosed with good walls, and is considered one of the pleasantest situations in the county of Middlesex. Connected with the farm, and lying about one and a half miles therefrom, is a good Pasture, containing about sixty acres, which will be sold with it, if desired.

For further particulars inquire of SIMON BROWN, Esq., editor of New England Farmer, or

Concord, Mass., Feb. 28. tf JOHN B. MOORE.

Fruit Trees—Fruit Stocks.

The subscriber offers for sale at the nursery of the late S. W. COLE, in Chelsea, a general assortment of Apple, Pear, Plum, Cherry and Peach trees, among which are many new and superior varieties, such as choice kinds of Apples, Kirkland's new Cherries, McLaughlin and other Plums, and hardy seedling Peaches of northern origin.

Also, Grape-vines, Quinces, Currants, Gooseberries, Raspberries, Thimbleberries and Cranberries. Among the Grapes are the famous Diana. Among the Gooseberries are Houghton's Seedling, the most valuable of all varieties, being hardy against the blight, and a great grower and bearer.

12,000 Cherry Stocks, from one to three years old.

10,000 Apple Stocks, from one to four years old.

Also, Pear, Plum and Quince Stocks, in smaller quantities.

☞ All orders thankfully received, and promptly executed, under the superintendence of an experienced nurseryman.

MARTHA S. COLE.

☞ Ruggles, Nourse, Mason & Co., Agents, Quincy Hall, Boston. tf* March 6.

Fruit Trees.

The proprietors offer for sale a large and fine stock of Fruit, and Ornamental Trees, Shrubs, Buckthorn Plants &c.

Pear, Apple, Peach, Cherry and Plum Trees of choice standard varieties. Also Quinces, Gooseberries, Currants, Raspberries, Strawberries, Grape Vines, &c.

Extra sized Hamburghs for the Conservatory or Grapery. A fine lot of Cherry and Apple Trees, two to four years from bud. The whole for sale at reduced prices.

D. & G. F. STONE,
Hammond Street, East Newton.

Jan. 10, 1852. w16t—*4t☞

Balsam Firs, Arbor Vitæ, and other Forest Trees.

HENRY LITTLE & CO., of Bangor, Maine, will furnish any number of Evergreen and other Forest Trees, taken up with earth on the roots, with the greatest care, and sent to any part of the United States by Steamers or Railroad—and carefully packed in large boxes, at short notice, at the following prices, viz:

From 6 inches to 1 foot, at 1 cent, or $10,00 per 1000.

From 1 foot to 2 feet, at 1½ cents, or $15,00 per 1000.

The above prices refer more particularly to Balsam Fir and Arbor Vitæ Trees.

We charge what the boxes cost, but nothing for packing.

For two years past, the trees we have procured and sent to a distance, have lived generally, and have given good satisfaction. Evergreens will not live unless taken up with great care.

Bangor, April 17, 1852. 4w*1

Bound Volumes.

BACK VOLUMES of the NEW ENGLAND FARMER, elegantly bound in Muslin, Gilt and Embossed, are now for sale at this office.

Boston, March 20, 1852. tf

Seed Potatoes.

CHOICE Early and Late sorts can be procured at our Seed Store. We invite particular attention to the "Eastern Early Blue," for very early, and the "Danvers Seedling" for late crops; of the latter sort 882 bushels were grown from 28 bushels of seed, the past summer.

RUGGLES, NOURSE, MASON & CO.,
Boston, March 27. Over Quincy Market.

The Farmers' Library.

JUST RECEIVED, the following assortment of Agricultural and Horticultural Books, embracing the standard works of eminent American and European writers, on the Farm, the Orchard, the Garden, &c. &c.

	PRICE.
American Farm Book, by Allen,	$1,00
Farmer's Treasure, by Faulkner and Smith,	75
Dana's Muck Manual,	1,00
Prize Essay on Manures, by Dana,	25
American Muck Book, by Browne,	1,00
Lectures on Practical Agriculture, by Johnstone,	75
Elements of Scientific Agriculture, by Norton,	50
Principles of Agriculture, by Thaer,	2,50
Practical Agriculture, by Johnstone,	75
Agriculture for Schools, by Blake,	1,00
Catechism of Agriculture and Chemistry, by Johnstone and Norton,	25
American Agriculturist, by Allen,	1,00
Liebig's Complete Work on Chemistry,	1,00
Farmer's and Emigrant's Hand Book, by Marshall,	75
Home for all, by Fowler,	50
Book of the Farm, by Stephens and Skinner,	4,00
Cottage and Farm Houses, by Downing,	2,00
Downing's Country Houses,	4,00
Rural Architecture, by Allen,	1,25
Downing's Landscape Gardening and Rural Architecture,	3,50
Downing's Cottage Residences,	2,00
Fruit Garden, by Barry,	1,25
Complete Gardener and Farmer, by Fessenden,	1,25
Bridgeman's Gardener's Assistant,	2,00
Bridgeman's Kitchen Gardener's Instructor,	50
American Fruit Culturist, by Thomas,	1,00
Gardener and Complete Florist,	25
Florist's Guide, by Bridgeman,	50
New England Fruit Book, by Ives,	56
Youatt and Martin on Cattle, by Stevens,	1,25
Rose Culturist,	38
Johnson's Gardener's Dictionary, by Landreth,	1,50
Rural Economy, by Boussingault,	1,00
American Rose Culturist,	25
Bigelow's Plants of Boston,	1,25
Genera of Plants of the U. S., by Gray, 2 vols.	12,00
Gray's Botany,	2,00
Parnell's Chemistry,	1,00
New England Farmer, by Cole,	1,00
Ladies' Guide and Skilful Housewife, by Mrs. Abel,	25
Hive and Honey Bee, by Richardson,	25
Bee Keeper's Manual, by Miner,	50
Bird Fancier, by Browne, paper 25 cents,	50
Townley on Bees,	50
American Poultry Yard, by Browne,	1,00
American Poulterers' Companion, by Bement,	1,00
American Fowl Breeder, by Moore,	25
American Herd Book, by Allen,	3,00
American Shepherd, by Morrill,	1,00
Domestic Animals, by Allen,	75
Diseases of Animals, by Cole,	50
Hints to Sportsmen, by Lewis,	1,25
Dadd's Anatomy and Physiology of the Horse,	1.00
Mason's Farrier and Stud Book, by Skinner,	1,25
Management of Sheep, by Canfield,	1,00
Youatt on the Pig,	60
Knowlson's Complete Cow Doctor,	25
Horse Doctor,	25
Guenon's Treatise on Milch Cows,	38
Treatise on Hot Houses, by Leuchars,	1,00
Allen on the Grape,	1,00
Loudon's Encyclopædia,	10,00
Schenck's Text Book,	50
Breck's Book of Flowers,	75
Downing's Fruit and Fruit Trees,	1,50

For sale at the Publishers' prices by RUGGLES, NOURSE, MASON & Co., Quincy Hall, (*over the Market,*) Boston.

April 3, 1852. tf

Grass and Clover Seeds.

1500 BUSHELS HERDS GRASS—(fine, superfine an extra.)
1000 bushels Pennsylvania Red Top—(extra.)
1000 do. do. do. (fine.)
600 do. Northern Red Top.
6000 pounds Northern Red Clover.
12,000 do. Western do.
4000 do. White Honeysuckle Clover.
200 do. Lucerne or French Clover.
100 bushels Orchard Grass.
100 do. Kentucky Blue Grass.
100 do. Fowl Meadow Grass.

And numerous other sorts, such as Sweet Vernal Grass, Rhode Island Bent, Lawn Grass, &c. &c., for sale in quantities to suit purchasers, by RUGGLES, NOURSE, MASON & CO.,

March 20, 1852. tf Over Quincy Market, Boston.

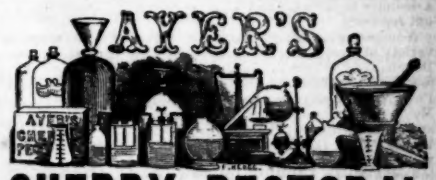
Garden Seeds.

WE respectfully solicit the attention of purchasers of GARDEN SEEDS to our extensive stock, which we offer for sale. We have all the sorts of Vegetable Seeds that have proved worthy of cultivation; also, Grain, Grass and Flower Seeds. All the varieties are raised and selected expressly for our trade, and we do with confidence recommend them to all who desire to procure seeds that will prove true to their names.

☞ Catalogues gratis, on application.

RUGGLES, NOURSE, MASON & CO.,

Jan. 1. Over Quincy Market, Boston.



CHERRY PECTORAL

For the Cure of

COUGHS, COLDS, HOARSENESS, BRONCHITIS, WHOOPING-COUGH. CROUP, ASTHMA, AND CONSUMPTION.

THIS invaluable remedy for all diseases of the Throat and Lungs has attained a celebrity, from its remarkable cures, never equalled by any other medicine before. Other preparations have shown themselves *palliatives*, and sometimes effected notable cures, but none has ever so fully won the confidence of every community where it is known. After years of trial in every climate, the results have indisputably shown it to possess a mastery over this dangerous class of diseases which could not fail to attract the attention of physicians, patients and the public generally.

See the statements, not of obscure individuals, and from far distant places, but of men who are known and respected throughout the country.

The widely-celebrated surgeon, Dr. VALENTINE MOTT, of New York city, says:—"It gives me pleasure to certify the value and efficacy of "*Ayer's Cherry Pectoral*," which I consider peculiarly adapted to cure diseases of the throat and lungs."

Dr. PERKINS, the venerable President of the Vermont Medical College, one of the eminently learned physicians of this country, writes, the *Cherry Pectoral* is extensively used in this section, where it has shown unmistakable evidence of its happy effects upon pulmonary diseases.

Rev. JNO. D. COCHRANE, a distinguished clergyman of the English Church, writes to the proprietor from Montreal that "he has been cured of a severe asthmatic affection, by *Cherry Pectoral*." His letter, at full length, may be found in our Circular, to be had of the Agent, and is worth the attention of asthmatic patients

This letter is from the well-known Druggist at Hillsdale, Michigan, one of the largest dealers in the State; and this case is from his own observation:

HILLSDALE, MICH., Dec. 10, 1849.

Dear Sir:—Immediately on receipt of your *Cherry Pectoral* I carried a bottle to an acquaintance of mine who was thought to be near his end with quick consumption. He was then unable to rise from his bed, and was extremely feeble. His friends believed he must soon die, unless relief could be obtained for him, and I induced them to give him your excellent medicine a trial. I immediately left town for three weeks, and you may judge of my surprise on my return, to meet him in the street on my way home from the cars, and find he had entirely recovered. Four weeks from the day he commenced taking your medicine, he was at work at his arduous trade of a black smith.

There are other cases within my knowledge, where the Cherry Pectoral has been singularly successful, but none so marked as this. Very truly yours,

G. W. UNDERWOOD.

PREPARED AND SOLD BY JAMES C. AYER,

Practical Chemist, Lowell, Mass.

Feb. 14, 1852. 3m

Pure Devon Stock.

COWS, HEIFERS, BULLS and BULL-CALVES for sale. Apply at Office of N. E. Farmer, or to the subscriber.

B. V. FRENCH,

Dec. 27, 1851. 1yr Braintree, Mass

LEWIS G. MORRIS'

THIRD ANNUAL SALE, BY AUCTION, OF

Improved Breeds of Domestic Animals

WILL TAKE PLACE AT

MOUNT FORDHAM, Westchester Co., (11 miles from City Hall, New York,) on Wednesday, JUNE 9, 1852.

JAMES M. MILLER, Auctioneer.

APPLICATION need not be made at private sale, as I decline in all cases, so as to make it an object for persons at a distance to attend. Sale positive to the highest bidder, without reserve.

Numbering about fifty head of Horned Stock, including a variety of ages and sex, consisting of Pure Bred Short Horns, Devons, and Ayrshires; Southdown Buck Lambs, and a very few Ewes; Suffolk and Essex Swine. Catalogues, with full Pedigrees, &c., &c., will be ready for delivery on the first of May—to be obtained from the subscriber, or at the offices of any of the principal Agricultural Journals or Stores in the Union. This sale will offer the best opportunity to obtain very fine animals I ever have given, as I shall reduce my herd lower than ever before, contemplating a trip to Europe, to be absent a year, and shall not have another sale until 1854.

It will be seen by reference to the proceedings of our State Agricultural Society that I was the most successful exhibitor of Domestic Animals, at the late State Fair.

I will also offer a new feature to American Breeders—one which works well in Europe; that is, *letting* the *services of male animals;* and will solicit propositions from such as see fit to try it. CONDITIONS—The animal hired, to be at the risk of the owner, unless by some positive neglect or carelessness of the hirer; the expense of transportation to and from, to be borne jointly; the term of letting, to be one year or less, as parties agree; price to be adjusted by parties—to be paid in advance, when the Bull is taken away; circumstances would vary the price; animal to be kept in accordance with instructions of owner, before taking him away.

I offer on the foregoing conditions, three celebrated Prize Bulls, "Major," a Devon, nine years old; "Lamartine," Short Horn, four years old; "Lord Eryholme," Short Horn, three years old. Pedigrees will be given in Catalogues.

At the time of my sale, (and I would not part with them before) I shall have secured two or three yearly setts of their progeny; and as I shall send out in August next a new importation of male animals, I shall not want the services of either of these next year. I would not sell them, as I wish to keep control of their propagating qualities hereafter.

I also have one imported Buck, the prize winner at Rochester last fall, imported direct from the celebrated Jonas Webb; and also five yearling Bucks, winners also, bred by me, from Bucks and Ewes imported direct from the above celebrated breeder; they will be let on the same conditions as the Bulls excepting that I will keep them until the party hiring wishes them, and they must be returned to me again on or about Christmas Day. By this plan, the party hiring gets rid of the risk and trouble of keeping a Buck the year round. All communications by mail must be prepaid, and I will prepay the answers. L. G. MORRIS.

Mount Fordham, March, 1852. 1w*3m

Circular.

THE subscriber takes this opportunity to return his thanks to the citizens of WALTHAM and vicinity for their liberal patronage for several years past, and solicits a continuance of the same. Orders for JOB PRINTING, of every description, promptly attended to, as usual, and returned immediately.

Address JOSIAH HASTINGS, Waltham.

N. B.—He would also give notice, that for the better accommodation of many of his customers, and the public generally in adjoining towns and at a distance, who now go to Boston by way of railroads, that he has made an arrangement with Mr. J. C. FRENCH, (formerly a workman in his office in Waltham,) at No. 11 CORNHILL, BOSTON, where orders for Book, Plain and Fancy Card and Job Printing, will be neatly and promptly executed on new Machine Presses, at the lowest prices, and returned immediately, by Express or other wise, as may best suit the convenience of customers.

Address J. C. FRENCH & CO.,

Feb. 7. tf* No. 11 Cornhill, Boston.

For Sale,

Four pleasantly situated dwellings in ELIOT STREET, JAMAICA PLAIN.

Also, two farms on WELD STREET, WEST ROXBURY;—the one containing about forty acres, with house and barn; the other containing about twenty-three acres, with house and two barns.

But a small portion of cash is wanted for any of this property. Apply to J. C. GORE, Jamaica Plain.

Feb. 21, 1852. 2m—*2

Choice Seed Peas.

OUR stock of Seed Peas for the present season, is remarkably fine, and comprises all the really desirable sorts, such as

Early Prince Albert.
Early Kent.
Early Hill.
Early Washington.
Bishop's Dwarf—(*grows 12 inches high.*)
Eatable Podded Sugar.
Dwarf Blue Imperial.
Dwarf Marrowfat.
Missouri Dwarf Marrowfat.
Champion of England.
British Queen.
Fall Matchless Marrow.
Black Eyed Early Marrow.
Cluster- (*for Field Culture,*) &c. &c.

We can recommend them all, and purchasers may rely on their proving true to name. Please call and examine them at our Warehouse and Seed Store, over Quincy Market.

RUGGLES, NOURSE, MASON & CO.

Boston, March 20, 1852. tf*

State Mutual Life Assurance Co.

OF WORCESTER.

GUARANTEE CAPITAL, $100,000.

Hon. JOHN DAVIS, President.

Hon. ISAAC DAVIS, } Vice
Hon. STEPHEN SALISBURY, } Presidents.

THIS Company was chartered in March, 1844, and commenced business on the first of June, 1845. Its business is conducted on the most economical principles.

The well considered and invariable policy of this Company has been to prefer the safety and mutuality of the assured to the showy advantages of a large number of policies, and an imposing amount of receipts. California risks have been uniformly declined, and the multiplication of policies in cities considered especially liable to cholera has not been encouraged.

The cash premiums of this company are calculated on the most approved tables of the probability of life, and at the lowest rates which are deemed safe.

Pamphlets, explaining the principles and advantages of life assurance, with forms of application and rates of premium, may be had by application at the Office of the Company in Worcester, or of the Agents in all the principal towns in New England. CLARENDON HARRIS, Secretary.

Dec. 27, 1851. 1atf*

Albany Drain Tile Works,

No. 60 LANCASTER STREET,—West of Medical College.

THE subscriber has now on hand, and will furnish to agriculturists, Horse Shoe and Sole Tiles of the most approved patterns, suitable for land drainage, of a superior quality, of over one foot in length. Horse Shoe Tile 2¾, 3½ and 4½ inches calibre, at $12, $15 and $18 ₱ 1000 pieces. Sole Tile 2¾ and 3½ inches calibre, at $12 and 18 per 1000 pieces. They are so formed as to admit water at every joint, draining land from 12 to 20 feet each side of the drain, being the cheapest and most durable article used. The great importance of thorough drainage is daily becoming more apparent.

Orders from a distance will receive prompt attention.

Albany, N. Y., April 10. 12w—*6 JOHN GOTT.

Walnut Grove Nursery.

JAMES HYDE & SON.

We have for sale at our Nursery a larger assortment of trees than ever before offered by us, consisting in part of Apple, Pear, Plum, Cherry and Peach.

Also, Quinces, Currants, Raspberries, Grapevines, &c. &c.

Ornamental Trees and Shrubs, Buckthorn Plants, &c. &c.

A prime lot of Red Dutch Currants, good size, $5 per hundred, or $40 per thousand.

Fine Apple trees, three to five years' growth from bud, seven to nine feet high, $25 per hundred, or $200 per thousand.

We devote ourselves solely to the raising of trees; they receive our strict personal attention; we are therefore able to warrant every article true to name.

Those who intend purchasing large quantities of Apple trees are respectfully invited to call before purchasing, and examine our stock, as it is large, and doubtless unsurpassed by any in the vicinity.

A liberal discount on all articles by the hundred.

Orders for Scions, (if sent early,) faithfully attended to.

Trees delivered in Boston free of expense, packed if desired.

Catalogues sent to *post-paid* applicants.

☞ All orders thankfully received, and promptly executed.

JAMES HYDE & SON.

Newton Centre, Feb. 21, 1852. 3m*

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Mexican Guano.

A NEW ARTICLE is now offered to the Agriculturist and Dealers, under the above name, from its having been found near the Mexican coast. It has been analyzed by C. T. Jackson, M. D., State Assayer, Boston, Dr. David Stewart, of Baltimore, and others. Dr. Stewart says it contains the largest proportion of Phosphates he has ever met with in Guano.

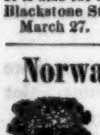
The following are the result of the analysis made by C. T. Jackson, M. D.:

Water	23.40
Vegetable Matter	15.80
Soluble Salts (in Water) Phos. Soda	0.12
Phosphates of Lime and Magnesia	60.50
Insoluble Matter (Selex)	0.10
	99,92

The quality of this Guano as a rich fertilizer, and the great reduction in price compared with the Peruvian, is such as to render it an object for the agriculturist and dealers to buy and give it a trial. It has been tried in the vicinity of Norfolk, Va., and much approved by the Farmers, those who are now buying and using of it freely. It may be obtained in lots to suit purchasers of A. D. WELD, 127 State Street, PHINEAS SPRAGUE & Co., T Wharf, or of P. A. STONE, who is the importer, and may be found at 15 Crescent Place, Boston, where also other information may be obtained respecting it. It is also for sale by Parker & White, 8 and 10 Gerrish Block, Blackstone Street, D. Prouty & Co., 19 North Market Street.

March 27. tf—*

Norway Spruce and Abor Vitæ.



The subscribers have on hand and for sale a fine lot of Norway Spruce, four to five feet high, thrifty and well shaped.

Also, a very fine stock of Arbor Vitæ, suitable for standards or hedges. Prices reasonable.

JAMES HYDE & SON.

Newton Centre, April 24, 1852. 5w*1

GRAPE VINES.

Diana, Isabella, Catawba, Strawberry and other varieties of Grape Vines, fresh from the nursery.

FRUIT TREES.

Fruit and Ornamental Trees, and Shrubbery of all kinds, from the best nurseries in the vicinity of Boston.

SCIONS.

Scions of all the choice kinds of Apples, Pears, Plums and Cherries, selected by experienced fruit growers.

HORTICULTURAL TOOLS.

A large assortment of Pruning and Budding Knives, Twig Cutters, Pruning Shears, Hedge do., Pruning Saws, Grafting Chissels, Strawberry and Weeding Forks, Transplanting Trowels, Sets of Ladies' Garden Tools, Shovels, Spades, Forks, Hoes in great variety, at wholesale and retail, at low prices, at RUGGLES, NOURSE, MASON & CO., (over the market.)

Boston, April 24, 1852. 6w*1

NEW ENGLAND FARMER

Is published on the first of every month, by JOHN RAYNOLDS and JOEL NOURSE, at Quincy Hall, South Market St., Boston.

SIMON BROWN, Editor.

FREDERICK HOLBROOK, } Associate
HENRY F. FRENCH, } Editors.

☞ Terms, $1,00 per annum in advance.

The FARMER, is devoted *exclusively* to Agriculture, Horticulture, and their kindred Arts and Sciences; making a neat volume of 576 octavo pages, embellished with numerous engravings. It may be elegantly bound in muslin, embossed and gilt, at 25 cts. a volume, if left at the office of publication.

☞ Also published at the same office every Saturday, on a large handsome folio sheet, the

NEW ENGLAND FARMER, (WEEKLY,)

An Independent Agricultural Family Newspaper.

The News and Miscellaneous departments under the charge of WILLIAM SIMONDS, will include a full and careful report of the news of the Markets, and the news of the week, such as Domestic, Foreign and Marine Intelligence, Congressional and Legislative proceedings, Temperance and Religious Intelligence, and a general variety of Literary and Miscellaneous matter, adapted to family reading, comprising more useful and valuable reading matter than any other Agricultural Newspaper published in New England. Everything of a hurtful or even doubtful tendency will be carefully excluded from its columns.

☞ Terms $2,00 per annum in advance.

The monthly contains nearly the same matter as the Agricultural department of the weekly.

☞ Postmasters and others, who will forward four new subscribers on the above named terms, for either publication, shall receive a fifth copy gratis for one year.

☞ All orders and letters should be addressed, *post-paid*,

RAYNOLDS & NOURSE,

QUINCY HALL, SOUTH MARKET STREET, BOSTON.

The postage on the New England Farmer, monthly, is as follows:

For any distance not exceeding 50 miles 5 cents *per year.*					
Over 50, and not exceeding	300 miles	10 cents *per year.*			
Over 300	"	"	1000	15	" "
Over 1000	"	"	2000	20	" "
Over 2000	"	"	4000	25	" "
Over 4000	"	"		30	" "

To prevent any misunderstanding, we quote the 16th section of the law of 3d March, 1845, which is as follows:

SEC. 16. And be it further enacted, that the term "Newspaper," herein before used, shall be, and the same is hereby defined to be, any printed publication, issued in numbers, consisting of not more than two sheets, and published at short stated intervals of not more than one month, conveying intelligence of passing events, and *bona fide extras* and *supplements* of such publication.